0074255

136177

100/300 AREA UNIT MANAGERS MEETING
APPROVAL OF MINUTES
September 13, 2007

APPROVAL: _____ Date 10/11/07

Stacy Charboneau, DOE/RL (A3-04)
River Corridor Project Manager

APPROVAL: _____ Date 10/11/07

Briant Charboneau, DOE/RL (A6-33)
Groundwater Project Manager

APPROVAL: _____ Date 10-11-2007

John Price, Ecology (H0-57)
Environmental Restoration Manager

APPROVAL: _____ Date 10-11-2007

Larry Gadbois, Rod Lobos, or Dennis
Faulk, EPA (B1-46)
100 Aggregate Area Unit Manager

APPROVAL: _____ Date 10-11-2007

Alicia Boyd, EPA (B1-46)
300 Aggregate Area Unit Manager

100/300 AREA UNIT MANAGER MEETING
ATTENDANCE AND DISTRIBUTION
September 13, 2007

NAME	E-MAIL ADDRESS	MSIN	COMP	SIGNATURE
Cook, Sylvia	Original +1 copy	H6-08	ADREC	N/A
Charboneau, Briant L	Briant_L_Charboneau@rl.gov	A6-33	DOE	
Charboneau, Stacy	Stacy_L_Charboneau@rl.gov	A3-04	DOE	
Clark, Clifford E	Clifford_E_Cliff_Clark@rl.gov	A5-15	DOE	
Guercia, Rudolph F	Rudolph_F_Rudy_Guercia@rl.gov	A3-04	DOE	
Hanson, James P	James_P_ Hanson@rl.gov	A5-13	DOE	
Hildebrand, R Doug	R_D_Doug_Hildebrand@rl.gov	A6-38	DOE	
Johnson, Vernon G	Vernon_G_Johnson@rl.gov	N/A	DOE	
Morse, John G	John_G_Morse@rl.gov	A6-11	DOE	
Robertson, Owen	Owen_Jr_Robertson@rl.gov	A3-04	DOE	
Sands, John P	John_P_Sands@rl.gov	A3-04	DOE	
Smith, Chris	Douglas_C_Chris_Smith@rl.gov	A3-04	DOE	
Thompson, Mike	K_M_Mike_Thompson@rl.gov	A6-38	DOE	
Tortoso, Arlene C	Arlene_C_Tortoso@rl.gov	A6-38	DOE	
Zeisloft, Jamie	Jamie_Zeisloft@rl.gov	A3-04	DOE	
Ayres, Jeffrey M	JAYR461@ECY.WA.GOV	H0-57	ECO	
Goswami, Dib	DGOS461@ECY.WA.GOV	H0-57	ECO	
Huckaby, Alisa D	AHUC461@ECY.WA.GOV	H0-57	ECO	
Jones, Mandy	MJON461@ECY.WA.GOV	H0-57	ECO	
Price, John	JPRI461@ECY.WA.GOV	H0-57	ECO	
Rochette, Elizabeth	BROC461@ECY.WA.GOV	H0-57	ECO	
Shea, Jacqueline	JASH461@ECY.WA.GOV	H0-57	ECO	
Smith-Jackson, Noe'l	NSMI461@ECY.WA.GOV	H0-57	ECO	
Vanni, Jean	Jvan461@ECY.WA.GOV	H0-57	ECO	
Whalen, Cheryl	CWHA461@ECY.WA.GOV	H0-57	ECO	
Boyd, Alicia	BOYD.ALICIA@EPA.GOV	B1-46	EPA	
Einan, Dave	EINAN.DAVID@EPA.GOV	B1-46	EPA	
Faulk, Dennis A	FAULK.DENNIS@EPA.GOV	B1-46	EPA	
Gadbois, Larry E	GADBOIS.LARRY@EPA.GOV	B1-46	EPA	
Lobos, Rod	LOBOS.ROD@EPA.GOV	B1-46	EPA	
Buelow, Laura	Buelow.Laura@epa.gov		EPA	
Bond, Rick				

100 & 300 AREA UNIT MANAGER MEETING MINUTES

Groundwater, Source Operable Units, Facility (D4 and ISS), and Mission Completion

September 13, 2007

Washington Closure Hanford (WCH) Building, 2620 Fermi Drive, Richland, Washington

ADMINISTRATIVE

- Next Unit Manager Meeting (UMM) - The next meeting will be held October 11, 2007 at the Washington Closure Hanford (WCH) Office Building, 2620 Fermi Avenue, room C209.
- Attendees/Delegations - Attachment A is the list of attendees. Representatives from each agency were present to conduct the business of the Unit Managers Meeting. Attachment B documents any delegations received from the agencies.
- Approval of Minutes – The August 9, 2007 meeting minutes were approved by the U.S. Environmental Protection Agency (EPA), Washington State Department of Ecology (Ecology), and U.S. Department of Energy, Richland Operations Office (RL).
- Action Item Status - Status of action items was performed, and updates provided (Attachment C).

  Attachment 1 is a copy of the "100 Area Remedial Design Report/Remedial Action Work Plan" revision schedule. This closes out Action Item 100-136.

  Attachment 2 provides documentation presented by RL to close out Action Item 100-142 regarding the 182-D reservoir. This was acceptable to Ecology.
- Agenda: Attachment D is the meeting agenda.

EXECUTIVE SESSION (Tri-Parties Only)

Attachment 3 was provided by Ecology and is titled, "Summary of MP-14 Process." EPA and Ecology iterated to RL that RL should impress upon its contractors to follow the MP-14 process.

Action 1: RL, with its contractors, will meet with Ecology to discuss their comments on the 100-D Orphan Site Report, and finalize the list of sites.

Action 2: Ecology shall provide RL with a list of where known data is missing from the Hanford Environmental Information System (HEIS) database.

Action 3: RL (groundwater staff) and RL (river corridor staff) shall provide each other their respective schedules regarding drilling and cleanup actions to assist in coordination efforts for the portion of the 100-D-56 pipeline that requires backfill prior to well installation.

100/300 AREA GROUNDWATER

Attachment 4 provides a status or information. No issues were identified, and no agreements were documented.

Action 1: RL shall set-up a meeting with EPA to discuss the path forward on the high chromium plume at the 100-K Area.

Action 2: RL shall provide Ecology with funding information regarding the Insitu Redox Manipulation (ISRM) iron field tests.

GROUNDWATER/SOURCE INTEGRATION

This item will be discussed at the next Unit Manager Meeting; no updates were provided.

100/300 AREA FIELD REMEDIATION CLOSURE

Attachments 5 through 14 provide a status or information for various projects in the 100/300 Area Field Remediation (FR) Project, or document specific agreements. Attachment 5 covers the 100-F Area. Attachment 6 covers the 100-B/C Area. Attachments 7, 8, 9, 10, and 11 are documented agreements that are identified below. Attachment 12 covers 118-K-1. Attachment 13 covers sampling and design. Attachment 14 documents the Annual Site-wide Institutional Controls review for the River Corridor Contractor, and provides the background, scope reviewed, and results.

No issues were identified, and no actions were documented.

Agreement 1: Attachment 7 documents EPA approval to use an exhauster to support the opening of remaining anomalies at the 100-B/C Area. This agreement allows adding this unit to the existing regulatory approval air monitoring plan at 100-B/C, and following the monitoring requirements already outlined in the air monitoring plan.

Agreement 2: Attachment 8 documents EPA approval of the backfill concurrence for the 118-F-1 Burial Ground.

Agreement 3: Attachment 9 documents EPA approval of the backfill concurrence for the 118-F-2 Burial Ground.

Agreement 4: Attachment 10 documents EPA approval of the backfill concurrence for the 118-F-5 Burial Ground.

Agreement 5: Attachment 11 documents EPA and RL approval of the "Air Monitoring Plan for the 100-F Area Burial Grounds and Remaining Sites Remedial Action" dated September 2007.

DEACTIVATION, DECONTAMINATION, DECOMMISSION, DEMOLITION (D4)/ INTERIM SAFE STORAGE (ISS)

Attachment 15 provides a status or information for the 300 Area, while Attachment 16 provides a status or information for the 100 Area. No issues were identified, and no actions were documented.

Agreement: Attachment 17 documents Ecology's approval to backfill the hydraulic oil spill area of the 183-N Waste Plant.

MISSION COMPLETION PROJECT

Attachment 18 provides a status or information. No issues were identified, no agreements were documented, and no actions were documented.

SPECIAL TOPICS

No issues were identified, no agreements were documented, and no actions were documented.

Attachment A

Borghese, Jane V	Jane_V_Borghese@rl.gov	E6-35	FH	Present
Fabre, Russel J	Russel_J_Fabre@rl.gov	E6-35	FH	
Jackson, Ron	Ronald_L_Jackson@rl.gov	E6-35	FH	Ron Jack
Piippo, Rob	Robert_E_Piippo@rl.gov	H8-12	FH	
Petersen, Scott	Scott_W_Petersen@rl.gov	E6-35	FH	
Robertson, Julie	Julie_R_Robertson@rl.gov	E6-35	FH	
Winterhalder, John A	John_A_Winterhalder@rl.gov	E6-35	FH	
Dresel, Evan	Evan.dresel@pnl.gov		PNNL	
Fruchter, Jonathan S	john.fruchter@pnl.gov	K6-96	PNNL	
Hartman, Mary J	mary.hartman@pnl.gov	K6-96	PNNL	
Peterson, Robert E	robert.peterson@pnl.gov	K6-75	PNNL	
Cimon, Shelly	scimon@oregontrail.net		Oregon	
Lilligren, Sandra	sandral@nezperce.org		TRIBES	
Bignell, Dale	Dale.Bignell@wch-rcc.com	H4-25	WCH	
Buckmaster, Mark A	mark.buckmaster@wch-rcc.com	X9-07	WCH	
Carlson, Richard A	richard.carlson@wch-rcc.com	X4-08	WCH	
Clapper, Nicholas	Nicholas.clapper@wch-rcc.com	X3-16	WCH	
Clark, Steven W	steven.clark@wch-rcc.com	H4-23	WCH	
Corpuz, Franklin M	franklin.corpuz@wch-rcc.com	L6-06	WCH	
Darby, John W	john.darby@wch-rcc.com	L6-06	WCH	
Dieterle, Steven E	steven.dieterle@wch-rcc.com	L1-04	WCH	
Dietz, Linda A	linda.dietz@wch-rcc.com	H4-22	WCH	
Dittmer, Lorna M	lorna.dittmer@wch-rcc.com	H4-23	WCH	
Donnelly, Jack W	jack.donnelly@wch-rcc.com	H4-22	WCH	
Fancher, Jonathan D (Jon)	jon.fancher@wch-rcc.com	X9-08	WCH	
Gano, Kenneth A (Ken)	kenneth.gano@wch-rcc.com	H4-21	WCH	
Golden, James W	james.golden@wch-rcc.com	X4-08	WCH	
Hadley, Karl A	karl.hadley@wch-rcc.com	X0-18	WCH	
Hedel, Charles W	charles.hedel@wch-rcc.com	H4-22	WCH	
Hulstrom, Larry C	larry.hulstrom@wch-rcc.com	H4-22	WCH	
Johnson, Wayne	Wayne.johnson@wch-rcc.com	H4-22	WCH	
Koegler, Kim J	kim.koegler@wch-rcc.com	L1-07	WCH	
Landon, Roger J	roger.landon@wch-rcc.com	H4-21	WCH	
Lerch, Jeffrey A	jeffrey.lerch@wch-rcc.com	H4-22	WCH	
Ludowise, John D	john.ludowise@wch-rcc.com	X4-08	WCH	
Miller, Larry R (Rex)	rex.miller@wch-rcc.com	X4-08	WCH	

Luttrell, Stuart stuart_p_luttrell@rl.gov

FH

Obenauer, Dale F	dale.obenauer@wch-rcc.com	X3-16	WCH	
Ovink, Roger W	roger.ovink@wch-rcc.com	H4-21	WCH	
Parnell, Scott E	scott.parnell@wch-rcc.com	L1-09	WCH	
Proctor, Megan	Megan.Proctor@wch-rcc.com	H4-21	WCH	
Queen, Jackie	Jackie.Dieterle@wch-rcc.com	H4-22	WCH	
Saueressig, Daniel G	Daniel.Saueressig@wch-rcc.com	X5-50	WCH	
Smet, Ann K (Annie)	annie.smet@wch-rcc.com	X4-08	WCH	
Strom, Dean N	dean.strom@wch-rcc.com	X3-40	WCH	
Thomson, Jill E	jill.thomson@wch-rcc.com	H4-22	WCH	
Weiss, Stephen G	stephen.weiss@wch-rcc.com	H4-22	WCH	
Yasek, Donna M	donna.yasek@wch-rcc.com	L1-07	WCH	
Black, Dale G	Dale.G.Black@rl.gov	H8-12	FH	

Attachment B

Donnelly, Jack W

From: Sands, John P [John_P_Sands@RL.gov]
Sent: Tuesday, September 11, 2007 2:14 PM
To: Donnelly, Jack W
Subject: FW: Delegation of TPA Project Manager authority and responsibility

John

From: Charboneau, Stacy L
Sent: Friday, August 03, 2007 1:09 PM
To: Faulk, Dennis (EPA); Gadbois, Larry (EPA); 'Rod Lobos/R10/USEPA/US'; Cameron, Craig (EPA); Huckaby, Alisa D; Price, John (ECY); 'Shea, Jacqueline (ECY)'; Bond, Rick
Cc: Franco, Jose R (Joe); Charboneau, Briant L; Hanson, James P; Morse, John G; Thompson, K M (Mike); Fletcher, Thomas W; Sands, John P; Zeisloft, Jamie; Smith, Douglas C (Chris); Guercia, Rudolph F (Rudy); Spencer, Charles G; Feist, Ella T; Dittmer, Lorna M; Bignell, Dale T; Johnson, Wayne F
Subject: Delegation of TPA Project Manager authority and responsibility

TPA Action Plan Section 4.1 states that "The Project Manager may delegate their authority and responsibilities with notice to the other affected party(ies)."

I am hereby designating John Sands as my alternate for when I am not present at the 100/300 Unit Manager Meetings.

Stacy

Attachment C

100/300 Area UMM
Action List
September 13, 2007

Open (O)/ Closed (X)	Action No.	Co.	Actionee	Project	Action Description	Status
X	100-003	RL	K. Bazzell	Field Remediation Closure	EPA and Ecology request DOE prepare a schedule for cleanup of the 200-CW-3 waste sites listed in the 100 Area Remaining Site Record of Decision.	Open: 7/13/06; Action: Closed 12/14/2006.
X	100-004	WC	L. Dittmer	Sample Design and Cleanup Verification	Present an errata sheet to provide consistent tritium cleanup levels between the 100 Area Burial Ground SAP and the 100 Area SAP.	Open: 7/31/06; Action: Closed 11/9/2006.
X	100-005	RL	K. Bazzell	General RCCC	EPA and Ecology request a meeting with the DOE person who can approve/disapprove language in the 100 Area Remedial Design Report. (Action associated with a proposed revision to the RDR to include descriptive language on ecorisk screening.)	Open: 7/13/06; Action: Closed 11/9/2006.
X	100-005B	EPA	J. Zeisloft	General RCCC	Revise the 100 Area RDR to include more specific language on the methodology and process for conducting ecological risk screening during closeout process.	Open: 9/14/06; Action: After several attempts to reach agreement, a workshop was scheduled with RL, EPA, and Ecology on August 21, 2007 to resolve. Item closed at 9/13/07 UMM.
X	100-006	RL	J. Zeisloft	100-K Field Remediation	RL to provide EPA and Ecology a copy of the NorthWind Characterization Report for 118-K-1.	Open: 7/13/06; Action: Completed 10/26/06
X	100-007	RL	J. Zeisloft	100-K Field Remediation	RL provide EPA and Ecology the status of the AMEC Report on 118-K-1.	Open: 7/13/06; Closed: 8/10/06 Action did not occur

100/300 Area UMM
Action List
September 13, 2007

Open (O)/ Closed (X)	Action No.	Co.	Actionee	Project	Action Description	Status
X	100-008	RL	K. Bazzell	Field Remediation	Provide WCH direction to evaluate other, existing, options for handling bottles containing liquids that are unearthed during remedial actions. Evaluate what is being done at other sites (Brookhaven; Sandia; DOE Lessons Learned website); evaluate how HAZM	Open: 9/14/06; Action: Competed 10/2/06
X	100-009	RL	R. Guercia	100-K D4	Send a copy of a building completion report (a quarterly report prepared to satisfy the DOE Order to take a facility "off the books.") as an alternate format of retrievable documentation.	Open: 9/14/06; Action: Complete 9/15/06
X	300-002	PN	B. Peterson M. Hartman	300-FF-5 Groundwater	Invite Jacqui Shea (Ecology), Alica Huckaby (Ecology), Alicia Boyd (EPA) to the September 300 Area aquifer tube sampling event.	Open: 7/13/06; Action: Completed 9/5/06
X	100-110	ECY	J. Price	100-H	John Price (Ecology) will send Kent Westover (RL) an email after looking at the information on the 116-H-4 table provided at the 10/12/06 UMM.	Open: 10/12/06; Action: Completed 10/13/06
X	100-111	RL	K. Westover	RCC General	RL shall propose a process for resolving sampling approaches where Ecology and RL differ, and multiple attempts at a technical level are exchanged without resolution.	Open: 10/12/06; Action: Ecology and RL agreed to close item; action closed 2/8/07.
X	100-112	RL	B. Charboneau	100-HR-3	RL will respond to Ecology's email request on the data and analysis request regarding the 100-HR-3 system.	Open: 10/12/06; Action: Data was provided, & Ecology is reviewing. On 4/12/07 this action was closed and a new action item generated (see action item 100-133).

100/300 Area UMM
Action List
September 13, 2007

Open (O)/ Closed (X)	Action No.	Co.	Actionee	Project	Action Description	Status
X	100-113	ECY	J. Price	100-HR-3	John Price will respond to RL's request to submit an annual report for the ISRM system versus a quarterly report. However, monthly data will still be sent to Ecology.	Open: 10/12/06; Action: Ecology approval documented in minutes. Completed 11/9/2006.
X	100-114	RL	B. Charboneau	Unknown	RL will send Ecology the schedule for the EM-22 Treatability Test Report	Open: 10/12/06; Action: Schedule entered into minutes. Completed 11/9/2006.
X	100-115	RL	B. Charboneau	100-D	RL will send Ecology the plans/actions for the 182-D Reservoir.	Open: 10/12/06; actions documented in minutes. Completed 11/9/2006.
X	100-116	RL	J. Zeisloft	100-D	RL and Ecology shall talk about the liquid removal from the 100-D-56 pipe.	Open: 10/12/06; Action: Completed 11/9/2006
X	100-117	ECY	J. Price	100-N	Ecology shall review the revegetation proposal for the 116-N-1 site and provide feedback.	Open: 10/12/06; Action: Proposal approved in minutes. Completed 11/9/2006.
X	100-118	ECY	J. Price	100-D	Ecology shall review the 100-D-56 chromium treatment plan	Open: 10/12/06; Action: Ecology submitted comments. Completed 11/9/2006.
X	300-003	RL	C. Smith	300-FF-2	RL shall provide EPA with the contamination control measures to move the MO-905 trailer within the onsite area.	Open: 10/12/06; Action: Completed 10/18/2006

100/300 Area UMM
Action List
September 13, 2007

Open (O)/ Closed (X)	Action No.	Co.	Actionee	Project	Action Description	Status
X	100-119	RL	J. Morse	100-HR-3	RL (John Morse) will set up a meeting with Ecology (John Price) on overall long-term picture for 100-HR-3.	Open: 11/9/06; Action: RL is scheduling a meeting in March 2007. On 4/12/07 this action was closed and a new action item generated (see action item 100-133).
X	100-120	RL	J. Morse	100-HR-3	RL (John Morse) will provide Ecology (Mandy Jones) with the 100-D well installation schedule, as well as the EM-22 Treatability Test well installation plans.	Open: 11/9/06; Action: RL to set up meeting in March 2007 to provide the schedule. On 4/12/07 this item was closed.
X	100-121	RL	J. Morse	100-FR-3	RL (John Morse) will provide EPA (Rod Lobos) with the Contaminates of Concern (COCs) plot for each well in 100-FR-3, including a list of wells sampled in October 2006 and those scheduled to be sampled in November 2006.	Open: 11/9/06; Action: Closed 12/14/2006
X	100-122	RL	J. Zeisloft	100-D	RL (Jamie Zeisloft) will set up a meeting with Ecology on the holistic 100-D characterization approach.	Open: 11/9/06; Action: Meeting was held; action closed 2/8/07.
X	100-123	RL	J. Zeisloft	100-D	RL (Jamie Zeisloft) will provide Ecology (Mandy Jones) with the overall 100-D project remediation schedule.	Open: 11/9/06; Action: Closed 12/14/2006
X	300-004	RL	C. Smith	618-10/11	RL (Chris Smith) will set up a meeting with EPA to discuss the M-16-67 milestone for 618-10/11 to ensure there are no issues with the design solution and completing the milestone.	Open: 11/9/06; Action: Closed 12/14/2006

100/300 Area UMM
Action List
September 13, 2007

Open (O)/ Closed (X)	Action No.	Co.	Actionee	Project	Action Description	Status
X	100-124	RL	K. Westover	General RCC	RL to evaluate whether it endorses use of analogous sites for site closeout (proposed by WCH), and communicate its opinion to Ecology and EPA. As a first step, RL will set up a meeting to focus on a current example of a waste site being proposed for closeout using this approach.	Open:12/14/06; Action: Item was closed 7/12/07.
X	100-125	RL	K. Bazzell	General RCC	RL to meet with EPA and Ecology on what systems or processes are in place to track remedial action costs for waste site closeout. Remedial Action Closeout Reports will capture this information but EPA and Ecology want to hear an update since the development of the 300-FF-1 Remedial Action Report (DOE/RL-2004-74, Rev. 0).	Open:12/14/06; Action: A summary was provided at the May 2007 UMM; closed 5/10/07.
X	100-126	RL	J.Morse	General RCC	RL (John Morse) will provide EPA with "DAVE" access.	Open:12/14/06; Action: Closed 1/11/07
X	100-127	RL	C. Smith	100-B/C	RL (Chris Smith) will provide EPA with the spent nuclear fuel disposition schedule for 100-B/C.	Open:12/14/06; Action: Closed 1/11/07
X	300-005	RL	R. Guercia	300 Area D4	RL shall provide EPA with status on the 324/327 building demolition strategy.	Open:12/14/06; Action: Closed 1/11/07
X	300-006	RL	R. Guercia	300 Area D4	The Tri-Parties will develop a process for closing out D4 actions where no known waste site is under the building, and no releases to soil are documented or expected based on existing data.	Open: 1/11/07; Action: RL will set up a meeting with EPA and Ecology to discuss. On 4/12/07 this item was closed.

100/300 Area UMM
Action List
September 13, 2007

Open (O)/ Closed (X)	Action No.	Co.	Actionee	Project	Action Description	Status
O	100-128	RL	R. Guercia	100-N	RL will schedule a briefing with Ecology in October 2007 on the piping near the 1310 and 1322-NB buildings.	Open: 1/11/07; Action: The RL point of contact person changed and the action item revised on 7/12/07.
X	100-129	RL	J. Morse	100-K	RL (John Morse) will provide EPA with a copy of "The KW Pump and Treat System Remedial Design and Remedial Action Work Plan, Supplement to the 100-KR-4 Groundwater Operable Unit Interim Action," DOE/RL-2006-52, Rev. 1.	Open: 1/11/07; Action: Closed 1/11/07
O	100-130	RL	J. Zeisloft	100 Areas	EPA and Ecology to discuss footnote in Cleanup Verification Packages/Remaining Site Cleanup Verification Packages (CVP/RSVPs) for immobile contaminates as related to the footnote stated in the Remedial Design Report/Remedial Action Work Plan for immobile contaminants.	Open: 1/11/07; Action: After several attempts to reach agreement, a workshop was scheduled with RL, EPA, and Ecology on August 21, 2007 to resolve.
X	100-131	RL	C. Smith	100 Areas	Ecology requests RL for an updated schedule on remediation designs and sampling work instructions through June 2009.	Open: 1/11/07; Action: Information provided; action closed 2/8/07.

100/300 Area UMM
Action List
September 13, 2007

Open (O)/ Closed (X)	Action No.	Co.	Actionee	Project	Action Description	Status
X	100-132	RL	C. Smith	100 Areas	RL will develop proposed changes to the verification sampling approach for tritium in soil.	Open: 2/8/07; Action: After several attempts to reach agreement, a workshop was scheduled with RL, EPA, and Ecology on August 21, 2007 to resolve. Item closed at 9/13/07 UMM.
X	300-007	RL	C. Smith	300 Area	EPA requested a meeting on 618-7 to be scheduled, and to include the Washington State Department of Health.	Open: 2/8/07; Action: Meeting was held and this item was closed on 4/12/07.
X	100-133	RL	J. Hanson	100-HR-3	RL and Fluor Hanford will schedule a meeting with Ecology to decipher data trends, and future plans for the chromium plume at the 100-H reactor.	Open: 4/12/07; Action: At the 5/19/07 UMM, RL stated a meeting has been scheduled for May 22. Meeting occurred; this item closed on 6/7/07.
O	300-008	RL	R. Guercia	100/300 Area	RL shall develop the instructions for documenting D4 completions in the 100 and 300 Areas where no known waste site is under the building, and no releases to soil are documented or expected based on existing data. These instructions shall be added into the respective Removal Action Work Plans after review and approval from the respective lead regulatory agency for the specific Removal Action Work Plans in the 100 and 300 Areas.	Open: 4/12/07; Action: Ongoing action, and are still under development.

100/300 Area UMM
Action List
September 13, 2007

Open (O)/ Closed (X)	Action No.	Co.	Actionee	Project	Action Description	Status
X	300-009	RL	J. Sands	300 Area	RL will follow up with EPA on any past or future land evaluations of the southern 300 Area referred to as the "triangle area" where new construction is starting.	Open: 4/12/07; Action: Closed on 7/12/07.
O	100-134	RL	J. Zeisloft	100-D Area	RL will respond to Ecology's electronic mail message sent on April 19, 2007 regarding the 126-D-1 Ash Pit.	Open: 5/10/07; Action: RL provided Ecology data on July 2, 07. Ecology sent comments, and is awaiting a response.
X	100-135	RL	C. Smith	100 Areas	RL will provide a draft of the 100 Area Explanation of Significant Difference (ESD), which adds waste sites, to EPA and Ecology for review.	Open: 6/14/07; Action: A draft of the ESD is nearly complete, and a briefing to EPA and Ecology still needs to occur. Item closed at 9/13/07 UMM.
X	100-136	RL	C. Smith	100 Areas	RL will provide EPA and Ecology with the schedule for the next revision of the 100 Area Remedial Design Report/Remedial Action Work Plan.	Open: 6/14/07; Action: The schedule will be provided in August 07. Item closed at 9/13/07 UMM.
X	100-137	Ecology	J. Price	100-D	Ecology is sending RL a letter requesting additional work modification (additional sampling) as described in the Hanford Federal Facility Agreement and Consent Order for the 100-D-30 and 100-D-56 sites.	Open: 7/12/07; Action: Ecology has a draft letter, but plans to discuss with S. Charboneau before sending. Item closed at 9/13/07 UMM.
X	100-138	RL	J. Hanson	100-K	RL will provide EPA with the next steps regarding the recent discovery of chromium at the KE area; specifically the results for well 199-K-141 and 199-K-142.	Open: 7/12/07; Action: A meeting was held on 7/26, and this action is closed.

100/300 Area UMM
Action List
September 13, 2007

Open (O)/ Closed (X)	Action No.	Co.	Actionee	Project	Action Description	Status
X	100-139	RL	J. Hanson	100-K	RL will provide EPA with a copy of the 30% design for the 100-KR-4 expansion.	Open: 7/12/07; Action: A meeting was held on 7/26, and this action is closed.
O	100-140	RL	S. Weil	100/300 Area	EPA requested information for each operable unit on the following areas: 1) total operable unit acreage/boundary map, 2) waste site acreage within each operable unit, and 3) acreage within each operable unit that is cleaned up. Additional discussions are expected on this subject.	Open: 7/12/07; Action: EPA sent RL a letter regarding this request. EPA contacted RL regarding the urgency of the request, and this is on schedule.
O	100-141	RL	J. Hanson	100/300 Area	RL shall set-up a meeting with EPA and Ecology regarding aquifer tube installation across the entire site.	Open: 8/9/07; Action: Meeting is being scheduled.
X	100-142	RL	J. Hanson	100-D	RL shall provide Ecology with a copy of the direction letter sent to the operating contractor regarding the operation changes to the 182-D reservoir to further minimize leakage.	Open: 8/9/07; Action: Item closed at 9/13/07 UMM.
O	100-143	RL	J. Zeisloft	100-D	RL, with its contractors, will meet with Ecology to discuss their comments on the 100-D Orphan Site Report, and finalize the list of sites.	Open: 9/13/07; Action:
O	100-144	RL	J. Morse	100 Areas	Ecology shall provide RL with a list of where known data is missing from the Hanford Environmental Information System (HEIS) database.	Open: 9/13/07; Action:
O	100-145	RL	J. Hanson/J. Zeisloft	100-D	RL (groundwater staff) and RL (river corridor staff) shall provide each other their respective schedules regarding drilling and cleanup actions to assist in coordination efforts for the portion of the 100-D-56 pipeline that requires backfill prior to well installation.	Open: 9/13/07; Action:

100/300 Area UMM
Action List
September 13, 2007

Open (O)/ Closed (X)	Action No.	Co.	Actionee	Project	Action Description	Status
O	100-146	RL	J. Hanson	100-K	RL shall set-up a meeting with EPA to discuss the path forward on the high chromium plume at the 100-K Area.	Open: 9/13/07; Action:

Attachment D

100/300 Area Unit Manager Meeting
September 13, 2007
Washington Closure Hanford Building
2620 Fermi Avenue, Richland, WA 99354
Room C209
1:00-4:30 p.m.

1:00 - 1:30 p.m. **Executive Session (Tri-Parties Only):**

- MP-14 process and its relationship with the orphan site process
- HEIS database
- Path forward for the portion of the 100-D-56 pipeline that requires backfill prior to well installation

1:35 p.m. - 2:00 p.m. **Administrative:**

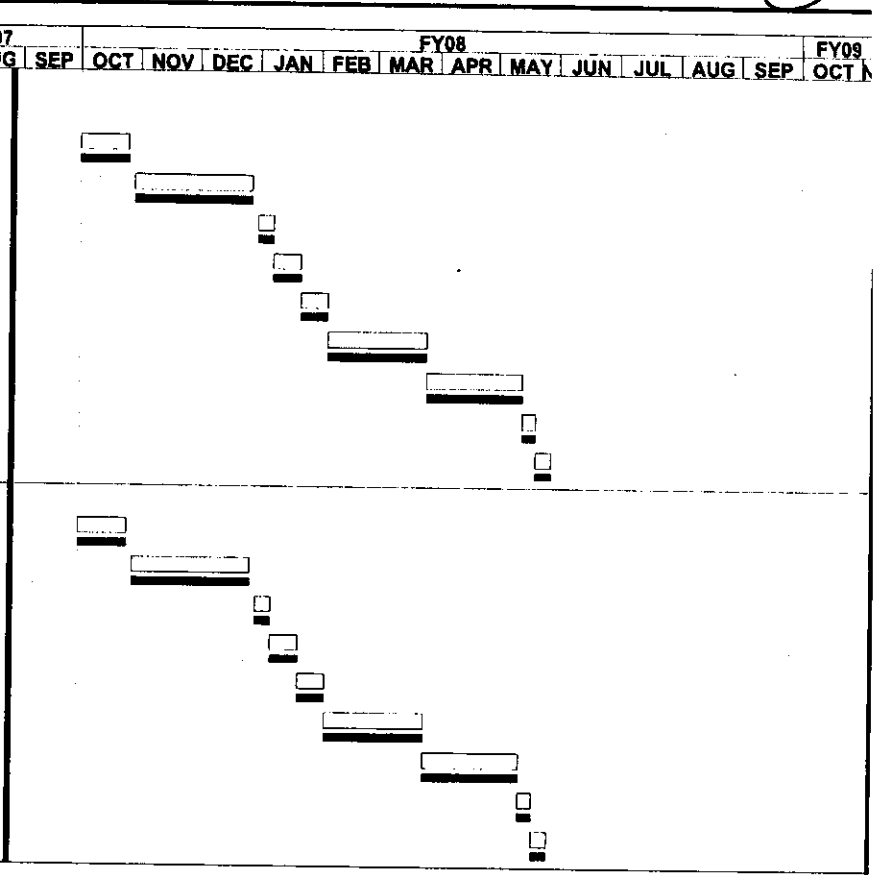
- Approval and signing of previous meeting minutes (August 2007)
- Update to Action Items List
- Next UMM (10/11/2007, Room C209)

2:00 - 4: 30 p.m. **Open Session: Project Updates:**

- 100/300 Area Groundwater (Jim Hanson/Jane Borghese)
- Groundwater/Source Integration
  - 5-year Record of Decision Review Update (Cliff Clark/Alicia Boyd)
- 100/300 Area Field Remediation and Closure (FR)
  - 100-F (Chris Smith/Jon Fancher)
  - 300-FF-2 (Chris Smith/John Darby)
  - 618-10/11 (Chris Smith/Scott Parnell)
  - 100-B/C (Chris Smith/Dean Strom)
  - 118-K-1 (Jamie Zeisloft/Dale Obenauer)
  - 100-D (Jamie Zeisloft/Mark Buckmaster)
  - Sampling and FR Design (Chris Smith/Lorna Dittmer/Rich Carlson)
  - Annual Institutional Controls Review for the River Corridor/John Sands
- D4/ISS
  - 300 Area D4 (Rudy Guercia/Donna Yasek)
  - 100 Area D4 (Rudy Guercia/Dan Saueressig)
  - ISS (Chris Smith/Dan Saueressig)
- Mission Completion (John Sands/Jeff Lerch/Jill Thomson)
- Special Topics

Attachment 1

Activity ID	DOE action	Activity Description	OD	RD	% Cmp	Early Start	Early Finish
Fld. Rem.-100N Non Site Specific Support							
100 Area RDR							
N25RDR10		100 Area RDR workshop	16	16	0	01OCT07	25OCT07
N25RDR20		100 Area RDR draft revisions	32	32	0	29OCT07	27DEC07
N25RDR30		100 Area RDR tech edit	4	4	0	31DEC07	07JAN08
N25RDR40		100 Area RDR internal review	8	8	0	08JAN08	21JAN08
N25RDR50		100 Area RDR incorporate comments	8	8	0	22JAN08	04FEB08
N25RDR60	D	100 Area RDR RL/Reg review	28	28	0	05FEB08	25MAR08
N25RDR70		100 Area RDR incorporate RL/reg comments	28	28	0	26MAR08	13MAY08
N25RDR80		100 Area RDR tech edit	4	4	0	14MAY08	20MAY08
N25RDR90	D	100 Area RDR - RL approve & issue Rev. 0	4	4	0	21MAY08	28MAY08
100 Area SAP							
N25SAP10		100 Area SAP workshop	16	16	0	01OCT07	25OCT07
N25SAP20		100 Area SAP draft revisions	32	32	0	29OCT07	27DEC07
N25SAP30		100 Area SAP tech edit	4	4	0	31DEC07	07JAN08
N25SAP40		100 Area SAP internal review	8	8	0	08JAN08	21JAN08
N25SAP50		100 Area SAP incorporate comments	8	8	0	22JAN08	04FEB08
N25SAP60	D	100 Area SAP RL/Reg review	28	28	0	05FEB08	25MAR08
N25SAP70		100 Area SAP incorporate RL/reg comments	28	28	0	26MAR08	13MAY08
N25SAP80		100 Area SAP tech edit	4	4	0	14MAY08	20MAY08
N25SAP90	D	100 Area SAP - RL approve & issue Rev. 0	4	4	0	21MAY08	28MAY08



Start Date 29AUG05
Finish Date 13MAR14
Data Date 27AUG07
Run Date 21AUG07 11:39

Early Bar
Target 1 Early Bar
Progress Bar
Critical Activity

FNC7

FY06-7-8 CPP 100N AREA FR

100 Area RDR

Attachment 2

Documentation for Action Item:

100-142	RL	J. Hanson	100-D	RL shall provide Ecology with a copy of the direction letter sent to the operating contractor regarding the operation changes to the 182-D reservoir to further minimize leakage.	Open: 8/9/07; Action:

Attached Emails contain a copy of the 'Timely Order" which describes the requirement the 182-D reservoir being operated during an "Emergency" condition only. During standby operations the reservoir water level will be maintained at 1 to 3 feet.

Borghese, Jane V

Subject: FW: 182-D Reservoir

From: Price, John (ECY) [mailto:Jpri461@ecy.wa.gov]
Sent: Thursday, August 23, 2007 9:53 AM
To: Hanson, James P
Cc: Jackson, Ronald L; Winterhalder, John A; Ortiz, Dickie J; Charboneau, Briant L; Shea, Jacqueline (ECY)
Subject: RE: 182-D Reservoir

Thanks for forwarding this. Jacqui & I discussed this, and we think that this timely order and the coming desktop instruction are adequate short-term responses.

We have one remaining concern: that we would like to discuss at the next UMM. We think the decommissioning schedule for the 182-D reservoir may be 2016. It make sense to us to have the reservoir decommissioned before then. We can explain and discuss our rationale at the UMM.

From: Hanson, James P [mailto:James_P_Hanson@RL.gov]
Sent: Wednesday, August 22, 2007 4:16 PM
To: Price, John (ECY); Shea, Jacqueline (ECY)
Cc: Jackson, Ronald L; Winterhalder, John A; Ortiz, Dickie J; Charboneau, Briant L
Subject: FW: 182-D Reservoir

John and Jacqui

Below is a copy of the FH "Timely Order" associated with the 182D reservoir levels which FH operates to. I spoke with Jim Day of FH and he will be generating a "Desktop Instruction" to provide additional clarity associated with the reservoir operation. Definition regarding "emergency use" is provided in the chain of emails below.

Hope this satisfies your questions regarding water levels at this location. Don't hesitate to give me a call on 373-9068 if you have additional questions.

Thanks,

JPH

CS&I

Water Utilities

TIMELY ORDER

Number: JLD-02-02-2007-01 Rev02

(Last issued 02/05/2007) New issue date: 08/14/2007

Date Expires: TBD - Review 08/31/2007

Subject: Operation of the 182D Reservoir

Actions Required/Expectations:

The 182-D Reservoir shall be operated during an "Emergency" condition only. An example of an emergency would be the inability to pump from 182-B. During pumping operations the reservoir water level will be kept 4 feet to 1 foot. During standby operations the reservoir water level will be maintained at 3 feet to 1 foot.

When you are required to initiate operations from 182D, call and inform either myself, Sam Camp or Jeff Thornock.

Any questions or concerns, please contact me (539-0846), Sam Camp (539-0878) or Jeff Thornock (521-3805).

Jim Day, Mgr.

Water & Sewer Utilities

2751E / 373-2366

From: Winterhalder, John A
Sent: Thursday, August 16, 2007 11:58 AM
To: Hanson, James P; Jackson, Ronald L; Petersen, Scott W
Cc: Mahood, Richard O; Raidl, Robert F; Winterhalder, John A; Swanson, L Craig
Subject: FW: 182-D Reservoir

Jim,

This is the response I got from Water Utilities. I followed up with a question about how long the Timely Order would remain in effect and Sam said for the foreseeable future.

Let me know if you need anything more.

John

From: Camp, Samuel L Jr (Sam)
Sent: Thursday, August 16, 2007 11:19 AM
To: Winterhalder, John A
Cc: Day, James L; Thornock, Jeffrey A
Subject: RE: 182-D Reservoir

John
We have a Timely Order in Place instructing the Operators that the 182D Reservoir will only be operated in an emergency condition. That condition is defined as the inability to pump water from the 182B Reservoir. Reservoir operating levels are established within the Timely order as: Maximum level - 4' with a minimum level of 1'. The 182D reservoir level is recorded daily with a follow-up log review to ensure those levels are not exceeded.
I hope this answers your request.

Samuel L. Camp Jr.
Water Utilities
Operations Supervisor
373-5824

Attachment 3

Summary of MP-14 Process

1. All new sites are submitted to the WIDS Administrator

2. WIDS administrator assigns WIDS ID# and classifies site as DISCOVERY.

   WIDS investigator fills out Discovery Checklist and determines if site meets criteria for a waste management unit (defined by TPA Section 3.1)

3. DOE and lead regulator review the Discovery Site check list and return form to WIDS investigator with changes.

   Sites determined to be waste management units are classified as ACCEPTED (PROPOSED) by WIDS administrator

   Sites determined not to be waste management units are classified as NOT ACCEPTED (PROPOSED) by WIDS administrator

4. If DOE and lead regulator concur, checklist is signed (if not go to dispute)

5. Based on signed checklist, WIDS administrator sets classification of site to ACCEPTED or NOT ACCEPTED

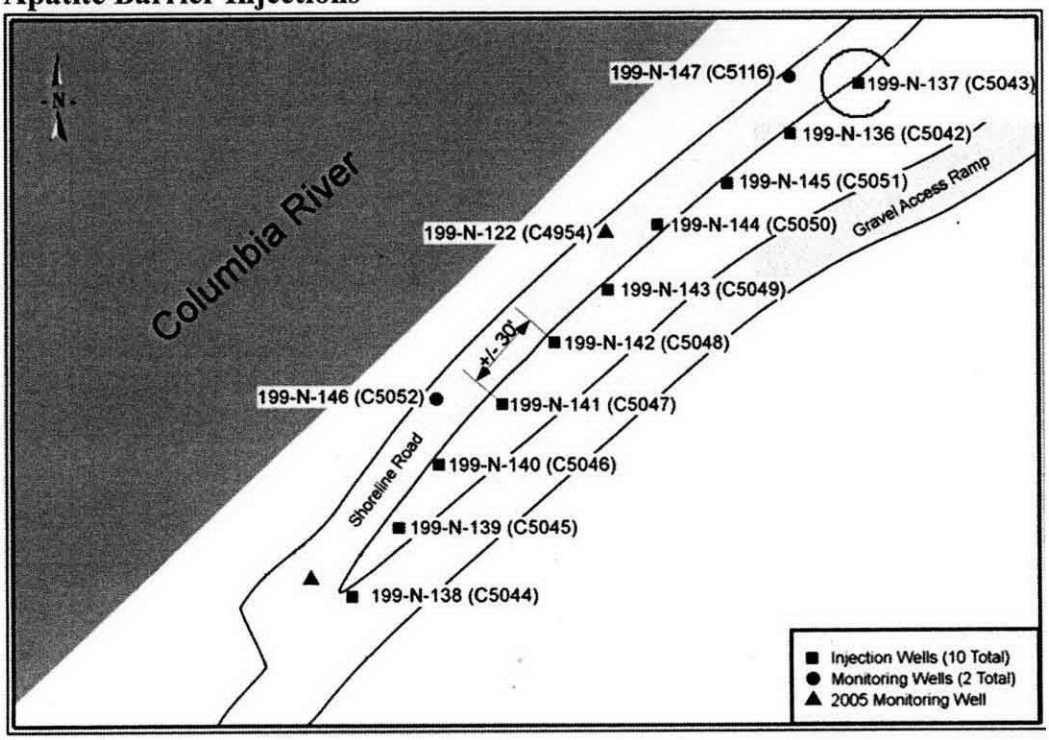
6. ACCEPTED sites may be reclassified (with agreement from DOE and lead regulator) later to REJECTED (based on qualitative info --historical info, etc), NO ACTION (based on quantitative data), CLOSED OUT, etc.

Attachment 4

100/300 Areas Unit Managers Meeting,
September 13, 2007

100-NR-2 Groundwater OU - Russ Fabre

Apatite Barrier Injections



Apatite Barrier Injections

- All Injections completed July 12, 2007.

Barrier Preliminary Performance on Sr 90 reduction

- Anticipate continued reductions as the apatite forms
- Sampling for Sr^{90} reduced to monthly intervals
- Draft Treatability Test Plan for high concentration injection in preparation

Compliance Well Number	Baseline Measurement/Date	August UMM Report	Latest Measurement/Date
199-N-123	1040 pCi/L 4/12/2006	460 pCi/L 7/20/2007	380 pCi/L 8/10/2007
199-N-138	811 pCi/L 4/26/2006	88 pCi/L 7/20/2007	90 pCi/L 8/10/2007
199-N-137	1000 pCi/L 7/07/2006	370 pCi/L 7/20/2007	480 pCi/L 8/10/2007
199-N-136	1800 pCi/L 7/07/2006	540 pCi/L 7/20/2007	430 pCi/L 8/10/2007
199-N-139	4500 pCi/L 7/07/2006	130 pCi/L 7/20/2007	190 pCi/l 8/10/2007
199-N-140	2000 pCi/L 7/07/2006	320 pCi/L 7/20/2007	200 pCi/L 8/10/2007
199-N-141	1000 pCi/L 7/07/2006	1100 pCi/L 7/20/2007	510 pCi/L 8/10/2007
199-N-142	2500 pCi/L 7/11/2006	520 pCi/L 7/20/2007	380 pCi/L 8/10/2007
199-N-122	1100 pCi/L 7/11/2006	1100 pCi/L 7/20/2007	1200 pCi/L 8/10/2007
199-N-143	2300 pCi/L 7/11/2006	1600 pCi/L 7/20/2007	1700 pCi/L 8/10/2007
199-N-144	1600 pCi/L 7/11/2006	1700 pCi/L 7/20/2007	1500 pCi/L 8/10/2007
199-N-145	4700 pCi/L 7/11/2006	220 pCi/L 7/20/2007	250 pCi/L 8/10/2007
199-N-146	660 pCi/L 7/11/2006	1600 pCi/L 7/20/2007	1100 pCi/L 8/10/2007
199-N-147	720 pCi/L 7/11/2006	930 pCi/L 7/20/2007	730 pCi/L 8/10/2007

100/300 Areas Unit Managers Meeting,
September 13, 2007

100-KR-4 Groundwater OU - Ron Jackson

- Remediation Treatment Status
  - For the period of August 1-26, 2007:
    - System operated normally. Due to feed pump problems extraction wells K-112, K-118, and K119 were shut down (August 19) until the pump is repaired. The feed pump is planned to be replaced in mid-late September.
    - Total average flow through the system was approximately 239 gpm.
    - Average influent hexavalent chromium concentration was 0.042mg/L.

- KR-4 Expansion
  - Continue with the K expansion design and preparing the RDR/RAWP Supplement (DOE-RL-2006-75, internal draft).
  - Completed 60 percent design package

- KW Groundwater Remediation
  - For the period of August 1-27, 2007:
    - System operated normally.
    - Total average flow through the system was approximately 98 gpm.
    - Average influent hexavalent chromium concentration was 0.107 mg/L.

100-K Area Drilling Status—Ron Jackson (FH)

- The drilling of eighteen wells to support the K expansion is planned for mid-late September 2007.

100-KR-4: K-Basins Monitoring Task—Bob Peterson (PNNL-updated 09/10/07)

- Leak Detection Monitoring:
  - The most recent results for routine quarterly sampling of wells in the K-Basins network are for some of the samples collected in late July 2007. Results are consistent with trends and expectations. There is no evidence to indicate groundwater impacts attributable to leakage of shielding water
  - The most recent results for monthly sampling at three wells close to the KE Basin (199-K-27, 199-K-29, and 199-K-109A) are for samples collected in July and August. Results are on trend. (Note: August sampling at K-109A was missed because of well maintenance issues. Well was successfully sampled on September 6).
- Monitoring Well Network:
  - The most recent quarterly sampling of K-Basins network wells occurred during late July/early August. The most recent monthly sampling near KE basin occurred in early September.
  - A pressure transducer was installed at 199-K-141 on August 10, 2007, and the well resampled on August 14, 2007. The hexavalent chromium was .264 mg/L.
- Reporting:
  - Nothing to report.

100/300 Areas Unit Managers Meeting,
September 13, 2007

100-HR-3 Groundwater OU - Ron Jackson

- Remediation Treatment Status
  - For the period August 1-26, 2007:
    - The system operated normally.
    - Total average flow through the system was approximately 177 gpm. Reduced flow due to sanding problems in extraction wells H4-3 and H4-4 (both wells have been redeveloped) and low water level in wells D8-72 and H4-12.
    - Average influent hexavalent chromium concentration for H Area was approximately less than 0.018 mg/L.
    - Average influent hexavalent chromium concentration for D Area was approximately 0.084 mg/L.
- DR-5 Treatment Status
  - For the period August 1-26, 2007:
    - System operated normally.
    - Total average flow through the system was approximately 39 gpm. Extraction wells D5-20 and D5-39 were off line due to power/communication cable problems. D5-20 returned to service during the week of September 3, 2007. D5-39 should return to service the week of September 17.
    - The average influent hexavalent chromium concentration was approximately 0.314 mg/L.
  - "Horn" Investigation
    - Continues to work on the Cultural Resource Assessment for installation of wells and aquifer tubes. Of the 21 well location sites, 12 sites have been cleared by the Cultural Resources Program and Tribes and drilling activities have been initiated; 9 wells and the aquifer tube sites are currently undergoing assessment – it is expected that the aquifer tube site locations will receive concurrence and initiate construction in the October-November timeframe meeting project criteria to place tubes during low river stage.
    - As of September 10, two wells have been constructed, one well being drilled, and one well at TD).
- Summary of ISRM Status
  - Chromium concentrations in groundwater sampled from select ISRM injection wells are about the same as those collected last July. (No change)
- EM-22 Technology Developments
  - Injecting micron-size iron into selected ISRM boreholes: MSE-Technology Applications has prepared a new schedule and budget for evaluating alternative iron compounds for injection. A revised contract is being prepared to accomplish this work. The field test, originally scheduled for July, 2007, has been postponed. (No Change)
  - EC Treatability Test-Continue to test EC on a 24 hour continuous operation. As of September 10, more than 2.1M gallons of groundwater have been processed through the EC. Per change request # TPA-CN-171 existing monitoring well D5-33 was connected to the system on August 20. Since this time, D5-33 has received approximately 1.1M gallons of treated water with an observed head build of 20 ft. Although this buildup is not unusually high, the project opted to divert all of the flow (September 7) to D5-106. The approach now is to get a better understanding, using D5-106, as to cause of potential plugging of the well under operating conditions.

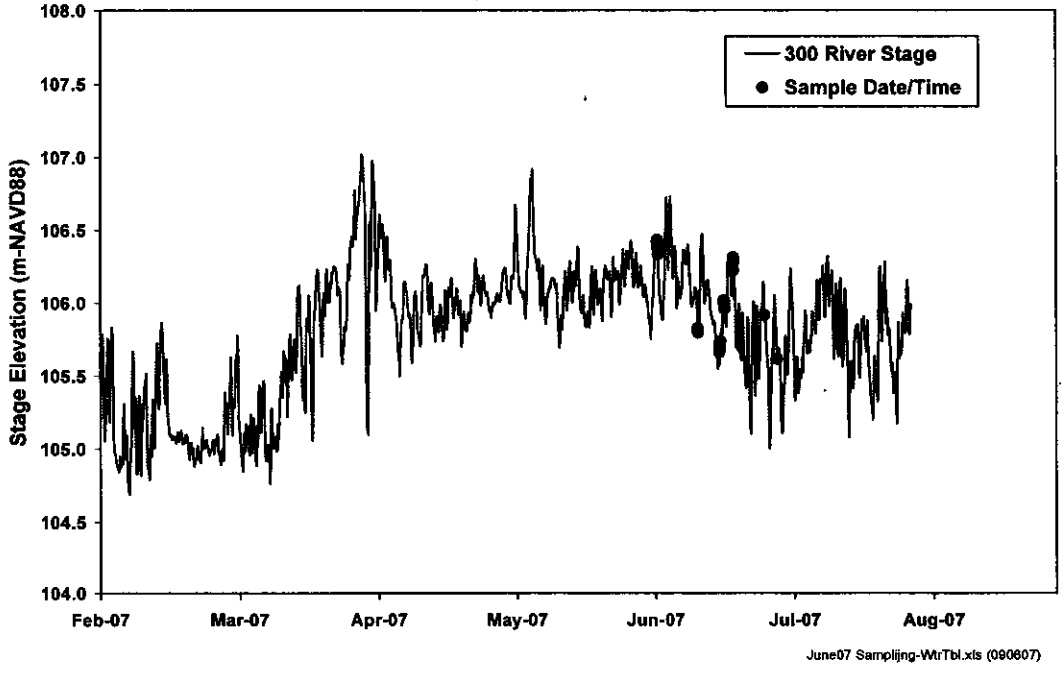
- The seven chromium source investigation wells are being sampled for hexavalent chromium every other week. Four new wells are being planned to further refine the chromium source in this area. (No change)
- EM-20 has committed their support for a chromium source investigation of the northern 100-D plume. (No change)
- Preparing for the molasses injection test is scheduled for September 2007.

HR-3/KR-4 Waste Management Plan- John Winterhalder

A revision to the HR-3/KR-4 Waste Management Plan is being worked. The plan has been through internal and RL reviews.

300-FF-5 Operable Unit—Bob Peterson and Ron Smith (PNNL)

- Operations and Maintenance Plan Activities
  - *300 Area Sampling and Analysis:* Most results are now available for samples collected during the semi-annual event in June 2007, which attempts to collect samples during the period of high water table conditions (see chart below). Available results are consistent with established trends and expectations.



  - *618-10 and 618-11 Subregions:* No new information to report.
- Phase III Feasibility Study
  - *Conceptual Site Model Report:* Under preparation. Release as a PNNL report is planned for September 30, 2007.
  - *Groundwater Flow Model:* New work involves refining grid parameters at the interface between the aquifer and the river channel. Riverbed alluvium influences the exchange between groundwater and river water.
  - *Review Comments on Risk Report and LFI Report:* Responses to external review comments have been prepared and are under discussion (PNNL and FHI).
- Other Activities

- *VOC Investigation:* Drilling started on September 4, 2007 for the first of three additional characterization boreholes. The borehole is being drilled at the South Process Pond footprint location (399-2-5).
- *Treatability Testing (EM-22):* Monitoring continues following the June 2007 injection.
- *300-FF-5 Update Public Workshop:* Workshop was held on August 29 at the WSU Tri-Cities CIC. Presentations are publicly available on http://www.hanford.gov/cp/gpp/library/programdocs-300.cfm.

100-BC-5 Operable Units—Mary Hartman

- New wells 199-B8-7 and 199-B8-8 were sampled 9/10/07. They will be sampled monthly from now to December, and quarterly thereafter.
- Last week a draft change notification was circulated to revise the groundwater SAP to add the two new wells.

100-FR-3 Operable Unit—Mary Hartman

All FY 2007 sampling is complete. No activities to report. FY 2008 sampling scheduled for October.

Attachment 5

(5)

G:\100F\100F_BGRS\050907B

E 579700

E 580300

E 580900

E 581500

COLUMBIA RIVER

Sept. 2007 Update

LEGEND
100-F FIELD REMEDIATION:
PREVIOUSLY REMEDIATED WASTE SITES
REMEDIATION SITES

X Backfill complete

PREVIOUSLY REMEDIATED WASTE SITE

1607-F5

N 148300

182-F

FULLER ROAD

116-F-16

116-F-8

100-F-33

1607-F3

132-F-1

1607-F7

126-F-2

100-F-31

128-F-2

141-C

N 147700

105-F

118-F-8:4

1607-F-4

118-F-3

118-F-2

100-F-38

100-F-36

116-F-15

100-F-20

Backfilling ongoing

118-F-5

118-F-7

118-F-9

128-F-3

120-F-1

118-F-1

Backfill complete

75% Complete excavation

N 147100

F AVE. SOUTH

FAIRBANKS AVENUE

118-F-6

plumes & bombs

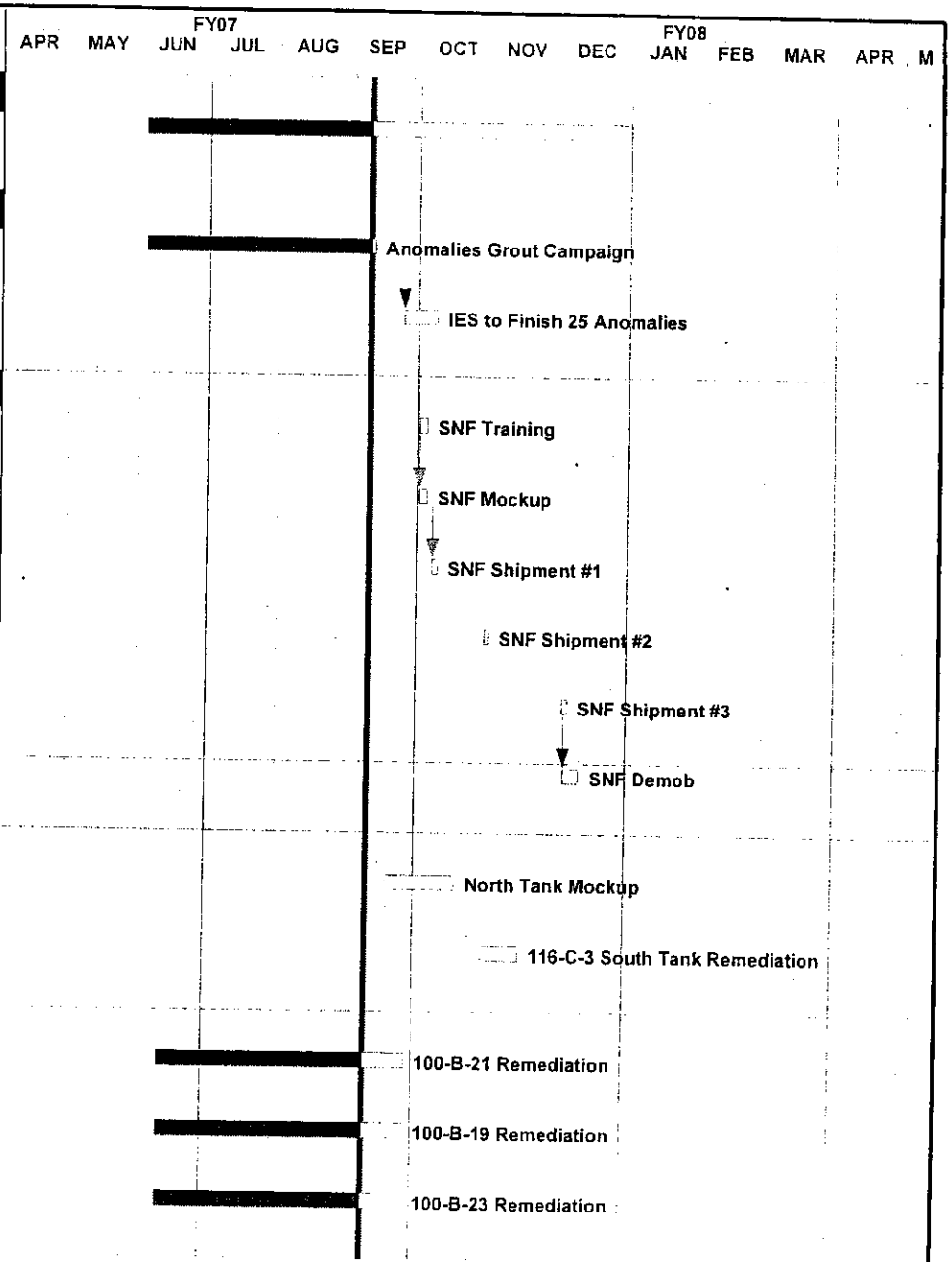
ON-SITE AREA

1607-F-1

F AVE. NORTH

Attachment 6

Activity ID	Activity Description	Orig Dur	Rem Dur	Early Start	Early Finish
100BC Area 2007 Scope - All in 1 Sch					
Total		121	65	04JUN07A	31DEC07
Anomalies					
1100	Anomalies Grout Campaign	25	2	04JUN07A	11SEP07
1070	IES to Finish 25 Anomalies	8	8	25SEP07*	08OCT07
SNF Shipment					
1120	SNF Training	3	3	02OCT07*	04OCT07
1130	SNF Mockup	3	3	02OCT07*	04OCT07
1140	SNF Shipment #1	2	2	[redacted]	[redacted]
1150	SNF Shipment #2	2	2	[redacted]	[redacted]
1160	SNF Shipment #3	2	2	[redacted]	[redacted]
1170	SNF Demob	4	4	05DEC07	11DEC07
116-C-3					
1060	North Tank Mockup	18	18	19SEP07*	18OCT07
1090	116-C-3 South Tank Remediation	10	10	31OCT07*	15NOV07
Remediation					
1010	100-B-21 Remediation	29	12	12JUN07A	27SEP07
1040	100-B-19 Remediation	29	12	12JUN07A	27SEP07
1050	100-B-23 Remediation	29	12	12JUN07A	27SEP07



Start Date 01JAN07
Finish Date 31MAR09
Data Date 10SEP07
Run Date 13SEP07 11:02

Early Bar
Progress Bar
Critical Activity

LOOK

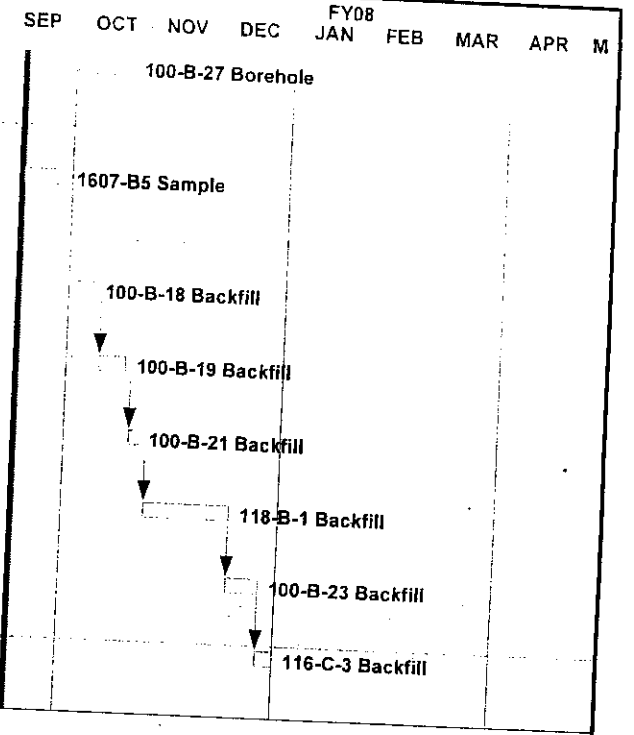
WCH

100-BC Schedule

Sheet 1 of 2

Date | Revision | Checked | Approved

Activity ID	Activity Description	Orig Dur	Rem Dur	Early Start	Early Finish
1000	100-B-27 Borehole	14	14	02OCT07*	24OCT07
Sample					
1030	1607-B5 Sample	11	11	11SEP07*	27SEP07
Backfill					
1210	100-B-18 Backfill	8	8	01OCT07*	11OCT07
1220	100-B-19 Backfill	8	8	15OCT07	25OCT07
1200	100-B-21 Backfill	4	4	29OCT07	01NOV07
1180	118-B-1 Backfill	21	21	05NOV07	10DEC07
1230	100-B-23 Backfill	8	8	11DEC07	24DEC07
1240	116-C-3 Backfill	4	4	25DEC07	31DEC07



Start Date 01JAN07
Finish Date 31MAR09
Data Date 10SEP07
Run Date 13SEP07 11:02

Early Bar
Progress Bar
Critical Activity

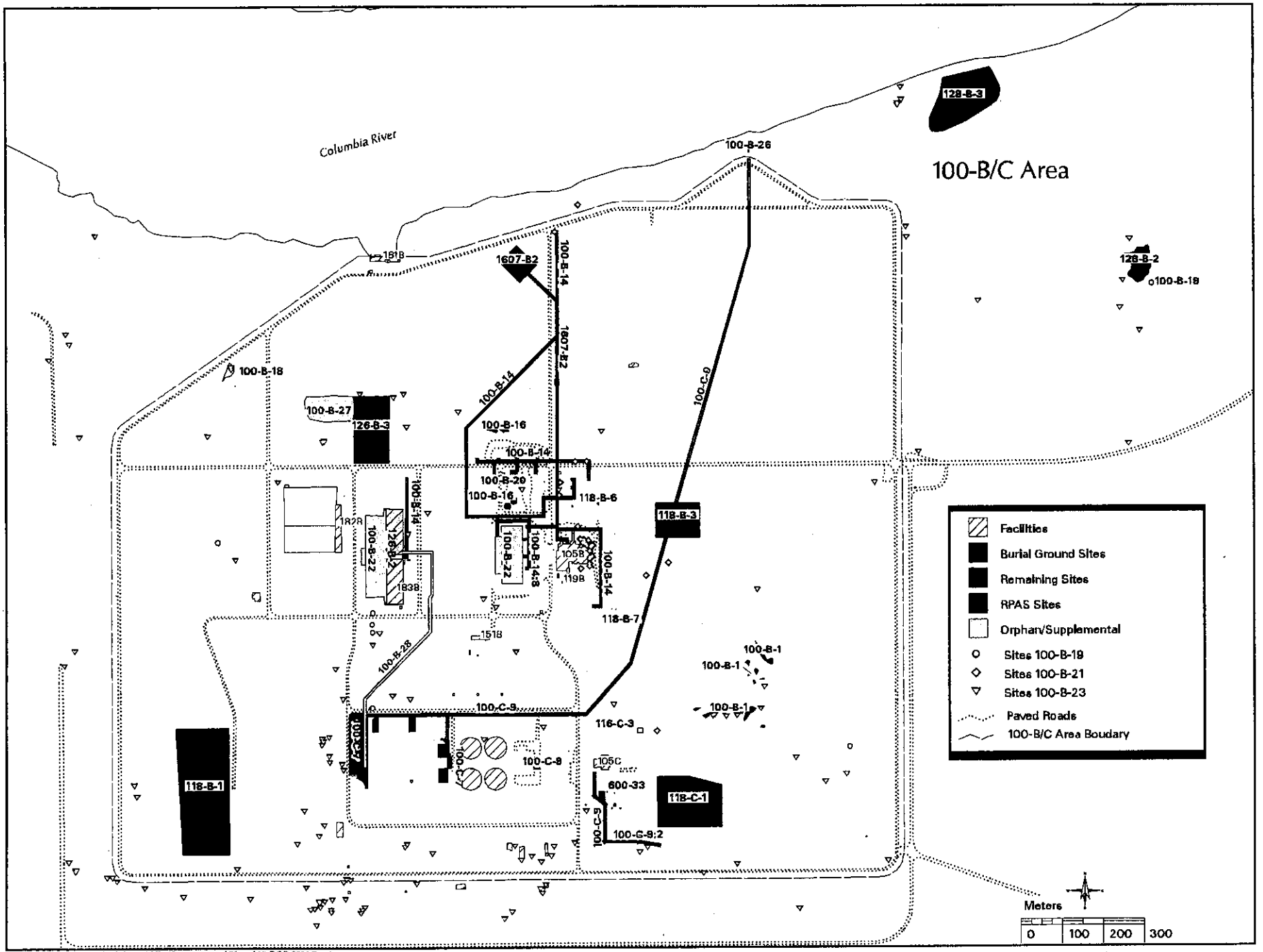
LOOK

WCH

100-BC Schedule

Sheet 2 of 2

Date | Revision | Checked | Approved



WCH:mas /home/maaye/amls/area_100bc/clean-ween.aml Plotted 18-DEC-2006 Rev 1

Attachment 7

(17)

Golden, James W

From: ^WCH Document Control
Sent: Monday, September 10, 2007 8:28 AM
To: Golden, James W
Subject: RE: Burial Grounds Calc

Jim,

CCN 135452

Mary

-----Original Message-----
From: Golden, James W
Sent: Monday, September 10, 2007 7:38 AM
To: ^WCH Document Control
Cc: Golden, James W
Subject: FW: Burial Grounds Calc

This email contains a regulatory decision for the 100B/C area. Please provide a chron #.

Jim
521-0877

-----Original Message-----
From: Faulk.Dennis@epamail.epa.gov [mailto:Faulk.Dennis@epamail.epa.gov]
Sent: Friday, September 07, 2007 11:50 AM
To: Golden, James W
Subject: Re: Burial Grounds Calc

Jim Sounds fine.

From: Golden, James W
Sent: Friday, September 07, 2007 9:04 AM
To: Faulk, Dennis A
Cc: Smith, Chris; Golden, James W; Strom, Dean N
Subject: Burial Grounds Calc

Dennis:

The 100 B/C project would like to build a containment unit with an air exhauster to support the opening of the remaining anomolies. The project ran a dose estimate to determine whether (or not) the exhauster effluent would be greater than .1 mrem/ year to the maximum exposed individual. If the effluent were greater than .1 mrem, we would need to add some type of inline monitoring system.

Since the effluent estimate is basically .005 mrem/ yr, I would like the option of using the exhauster ((also referred to as a portable temporary radiological air exhauster unit (PTRAEU)) to the existing air monitoring plan, without adding any additional monitoring requirements.

If you agree, please provide your response via this email and I can document the agreement at the next UMM.

Thanks,
Jim
521-0877

From: Blakley, Tina M
Sent: Thu 9/6/2007 2:58 PM
To: Golden, James W
Subject: RE: Burial Grounds Calc

Jim –

I ran the CAP88 using just the HEPA filter PTE (from all the sites in the original calc). I get a TEDE of 5.07E-03 mrem/yr at 10,164 m West Northwest.

Multiplying the ratio of HEPA Ci/yr to Total Ci/yr by the total TEDE gave a HEPA TEDE of 7.64E-05 mrem/yr.

Guess it isn't the liner relationship we thought it would be. Still its much less than 0.1 mrem/yr.

Let me know if you need me to formalize any of this in a calc. Sorry to take so long to get you the answer.

Tina

From: Golden, James W
Sent: Thursday, September 06, 2007 7:27 AM
To: Blakley, Tina M
Subject: Burial Grounds Calc

Here's what I was using!

<< File: BURIALGROUND AIR CALC.pdf >>

Since it doesn't have totals, the table in the AMP is more convienent.

<< File: AMP.pdf >>

Jim

Attachment 8

(8)

Waste Site: 118-F-1 Burial Ground	**BACKFILL CONCURRENCE CHECKLIST** (Concurrence to Proceed with Waste Site Backfill Operations)	WIDS Nos: 118-F-1

This checklist is a summary of cleanup verification results for the 118-F-1 Burial Ground. The checklist is intended as an agreement allowing the RCCC subcontractor to backfill the burial ground excavation prior to the issuance of the final cleanup verification package. The lead regulatory agency has been provided copies of detailed calculations. The results are summarized below. 0582768

Regulatory Requirement	Remedial Action Goals (RAG)	Results	RAG Attained	Ref.
Direct Exposure – Radionuclides	1. Attain 15 mrem/yr dose rate above background over 1000 years.	1. Maximum dose rate calculated by RESRAD is 4.59 mrem/yr.	Yes	B
Direct Exposure – Nonradionuclides	1. Attain individual COC RAGs.	1. All individual COC concentrations are below the RAGS.	Yes	B, C
Meet Nonradionuclide Risk Requirements	1. Hazard quotient of less than 1 for noncarcinogens.	1. The hazard quotients for individual nonradionuclide COCs in the shallow zone and overburden are less than 1.	Yes	D
	2. Cumulative hazard quotient of less than 1 for noncarcinogens.	2. The cumulative hazard quotient is less than 1 for the shallow zone and overburden.		D
	3. Excess cancer risk of $<1 \times 10^{-6}$ for individual carcinogens.	3. Excess cancer risk values for individual nonradionuclide COCs are less than 1×10^{-6}.		D
	4. Attain a total excess cancer risk of $<1 \times 10^{-5}$ for carcinogens.	4. Total excess cancer risk is less than 1×10^{-5}.		D
Groundwater/River Protection – Radionuclides	1. Attain single COC groundwater & river RAGS.	1. Cesium-137, cobalt-60, nickel-63, strontium-90, and tritium are calculated to reach groundwater in the 1,000 years of the RESRAD model run. However, none of these constituents is predicted to migrate to groundwater (and thus the Columbia River) at concentrations exceeding groundwater or river criteria within 1,000 years. Therefore, residual concentrations achieve the remedial action objectives for groundwater and river protection.	Yes	B
	2. Attain National Primary Drinking Water Regulations 4-mrem/yr (beta/gamma) dose standard to target receptor/organ.	2. All organ specific doses are below the 4-mrem/yr dose standard.		E
	3. Meet drinking water standards for alpha emitters: the more stringent of 15 pCi/L MCL or 1/25th of the derived concentration guide for DOE Order 5400.5.	3. RESRAD modeling indicates that the alpha emitting COCs will not impact groundwater. Therefore, the alpha activity is 0 pCi/L for all years.		E
	4. Meet total uranium standard of 21.2 pCi/L.	4. Isotopic uranium concentrations are below background.		B
Groundwater/River Protection – Nonradionuclides	1. Attain individual nonradionuclide groundwater and river cleanup requirements.	1. Residual concentrations of lead exceeded soil RAGs for the protection of groundwater and/or the Columbia River. However, it is predicted that lead will not migrate to groundwater (and thus the Columbia River) at concentrations exceeding groundwater or river criteria within 1,000 years. Therefore, residual concentrations achieve the remedial action objectives for groundwater and river protection.	Yes	B

Waste Site: 118-F-1 Burial Ground	BACKFILL CONCURRENCE CHECKLIST (Concurrence to Proceed with Waste Site Backfill Operations)	WIDS Nos: 118-F-1
Other Supporting Information	1. Sample location design calculation brief.	F
	2. Focus sample results.	G
	3. Verification sample location map.	A

All citations above and references on attached sheet are on record with Washington Closure Hanford, Inc., Document Control. Above noted regulatory requirements have been attained.

WCH Project Manager	Date	WCH Project Engineer	Date	DOE Project Manager	Date
	7/12/07		7/12/07		7/12/07

Given the attached information, DOE can proceed with backfill of the site with minimal risk. Final approval that the site has met RAOs and RAGs will occur with the submittal, review, and approval of the Cleanup Verification Package by the lead regulatory agency.

EPA Project Manager	Date	Ecology Project Manager	Date
	7-16-07	N/A	N/A

Backfill Concurrence Checklist Attachments/References

Attachment/ Reference	Description
A	118-F-1 Burial Ground Cleanup Verification Sample Location Map
B	118-F-1 Burial Ground Cleanup Verification RESRAD Calculation, Calculation No. 0100F-CA-V0280
C	118-F-1 Burial Ground Cleanup Verification 95% UCL Calculation, Calculation No. 0100F-CA-V0279
D	118-F-1 Burial Ground Hazard Quotient and Carcinogenic Risk Calculation, Calculation No. 0100F-CA-V0283
E	118-F-1 Burial Ground Cleanup Verification Comparison to Drinking Water Standards Calculation, Calculation No. 0100F-CA-V0281
F	118-F-1 Burial Ground Shallow Zone, Process Trenches, and Overburden Sample Design, Calculation No. 0100F-CA-V0282
G	Comparison of 118-F-1 Focus Sample Results to Generic Site Lookup Values and Results from 118-F-1 Asbestos Focus Samples

Attachment 9

Waste Site: 118-F-2 Burial Ground	**BACKFILL CONCURRENCE CHECKLIST** (Concurrence to Proceed with Waste Site Backfill Operations)	WIDS Nos: 118-F-2

This checklist is a summary of cleanup verification results for the 118-F-2 Burial Ground. The checklist is intended as an agreement allowing the RCCC subcontractor to backfill the burial ground excavation prior to the issuance of the final cleanup verification package. The lead regulatory agency has been provided copies of detailed calculations. The results are summarized below. 0582769

Regulatory Requirement	Remedial Action Goals (RAG)	Results	RAG Attained	Ref.
Direct Exposure – Radionuclides	1. Attain 15 mrem/yr dose rate above background over 1000 years.	1. Maximum dose rate calculated by RESRAD is 1.13 mrem/yr.	Yes	A
Direct Exposure – Nonradionuclides	1. Attain individual COC RAGs.	1. All individual COC concentrations are below the RAGS.	Yes	B
Meet Nonradionuclide Risk Requirements	1. Hazard quotient of less than 1 for noncarcinogens.	1. The hazard quotients for individual nonradionuclide COCs in the shallow zone and overburden are less than 1.	Yes	B
	2. Cumulative hazard quotient of less than 1 for noncarcinogens.	2. The cumulative hazard quotient is less than 1 for the shallow zone and overburden.		B
	3. Excess cancer risk of $<1 \times 10^{-6}$ for individual carcinogens.	3. Excess cancer risk values for individual nonradionuclide COCs are less than 1×10^{-6}.		B
	4. Attain a total excess cancer risk of $<1 \times 10^{-5}$ for carcinogens.	4. Total excess cancer risk is less than 1×10^{-5}.		B
Groundwater/River Protection – Radionuclides	1. Attain single COC groundwater & river RAGS.	1. Cesium-137 is calculated to reach groundwater in the 1,000 years of the RESRAD model run. However, it is not predicted to migrate to groundwater (and thus the Columbia River) at concentrations exceeding groundwater or river criteria within 1,000 years. Therefore, residual concentrations achieve the remedial action objectives for groundwater and river protection.	Yes	A
	2. Attain National Primary Drinking Water Regulations 4-mrem/yr (beta/gamma) dose standard to target receptor/organ.	2. All organ specific doses are below the 4-mrem/yr dose standard.		C
	3. Meet drinking water standards for alpha emitters: the more stringent of 15 pCi/L MCL or 1/25th of the derived concentration guide for DOE Order 5400.5.	3. RESRAD modeling indicates that the alpha emitting COCs will not impact groundwater. Therefore, the alpha activity is 0 pCi/L for all years.		C
	4. Meet total uranium standard of 21.2 pCi/L.	4. Isotopic uranium concentrations are below background.		A
Groundwater/River Protection – Nonradionuclides	1. Attain individual nonradionuclide groundwater and river cleanup requirements.	1. Residual concentrations of selenium exceeded soil RAGs for the protection of the Columbia River. However, it is predicted that selenium will not migrate to the Columbia River at concentrations exceeding river criteria within 1,000 years. Therefore, residual concentrations achieve the remedial action objective for river protection.	Yes	A

Waste Site: 118-F-2 Burial Ground	BACKFILL CONCURRENCE CHECKLIST (Concurrence to Proceed with Waste Site Backfill Operations)	WIDS Nos: 118-F-2
Other Supporting Information	1. Sample location design calculation brief.	D
	2. Focus sample locations, results, and comparison to action levels.	E
	3. LARADS survey	F

All citations above and references on attached sheet are on record with Washington Closure Hanford, Inc., Document Control. Above noted regulatory requirements have been attained.

WCH Project Manager	Date	WCH Project Engineer	Date	DOE Project Manager	Date
	8/16/07		8-16-07		8/17/07

Given the attached information, DOE can proceed with backfill of the site with minimal risk. Final approval that the site has met RAOs and RAGs will occur with the submittal, review, and approval of the Cleanup Verification Package by the lead regulatory agency.

EPA Project Manager	Date	Ecology Project Manager	Date
	8-27-07	N/A	N/A

Backfill Concurrence Checklist Attachments/References

Attachment/ Reference	Description
A	118-F-2 Burial Ground Cleanup Verification RESRAD Calculation, Calculation No. 0100F-CA-V0286
B	118-F-2 Cleanup Verification 95% UCL Calculation, Calculation No. 0100F-CA-V0285
C	118-F-2 Burial Ground Cleanup Verification Comparison to Drinking Water Standards Calculation, Calculation No. 0100F-CA-V0287
D	118-F-2 Burial Ground Sample Design Shallow Zone / Stockpiles (ACL/BCL) Sampling Plan, Calculation No. 0100F-CA-V0284
E	118-F-2 Focus Sample Locations, Results, and Comparison to Generic Site Lookup Values
F	118-F-2 LARADS Survey

Attachment 10

Waste Site: 118-F-5 Burial Ground	**BACKFILL CONCURRENCE CHECKLIST** (Concurrence to Proceed with Waste Site Backfill Operations)	WIDS Nos: 118-F-5

This checklist is a summary of cleanup verification results for the 118-F-5 Burial Ground. The checklist is intended as an agreement allowing the RCCC subcontractor to backfill the burial ground excavation prior to the issuance of the final cleanup verification package. The lead regulatory agency has been provided copies of detailed calculations. The results are summarized below. 0582793

Regulatory Requirement	Remedial Action Goals (RAG)	Results	RAG Attained	Ref.
Direct Exposure – Radionuclides	1. Attain 15 mrem/yr dose rate above background over 1000 years.	1. Maximum dose rate estimated using generic dose equivalence lookup values is 5.7 mrem/yr.	Yes	A, C
Direct Exposure – Nonradionuclides	1. Attain individual COC RAGs.	1. There are no non-radionuclide COCs for the 118-F-5 Burial Ground.	Yes	A
Meet Nonradionuclide Risk Requirements	1. Hazard quotient of less than 1 for noncarcinogens.	1. There are no non-radionuclide COCs for the 118-F-5 Burial Ground.	NA	NA
	2. Cumulative hazard quotient of less than 1 for noncarcinogens.	2. There are no non-radionuclide COCs for the 118-F-5 Burial Ground.		NA
	3. Excess cancer risk of $<1 \times 10^{-6}$ for individual carcinogens.	3. There are no non-radionuclide COCs for the 118-F-5 Burial Ground.		NA
	4. Attain a total excess cancer risk of $<1 \times 10^{-5}$ for carcinogens.	4. There are no non-radionuclide COCs for the 118-F-5 Burial Ground.		NA
Groundwater/River Protection – Radionuclides	1. Attain single COC groundwater & river RAGS.	1. No radionuclide COCs were quantified above groundwater/river protection lookup values.	Yes	A
	2. Attain National Primary Drinking Water Regulations 4-mrem/yr (beta/gamma) dose standard to target receptor/organ.	2. No radionuclide COCs were quantified above groundwater/river protection lookup values.		A
	3. Meet drinking water standards for alpha emitters: the more stringent of 15 pCi/L MCL or $1/25^{th}$ of the derived concentration guide for DOE Order 5400.5.	3. No alpha-emitting radionuclide COCs were quantified above groundwater/river protection lookup values.		A
	4. Meet total uranium standard of 21.2 pCi/L.	4. Uranium was not identified as a site COC.		NA
Groundwater/River Protection – Nonradionuclides	1. Attain individual nonradionuclide groundwater and river cleanup requirements.	1. There are no non-radionuclide COCs for the 118-F-5 Burial Ground.	NA	A
Other Supporting Information	1. Sample location design calculation brief. 2. 118-F-5 GPERS Radiological Survey Map			A D

All citations above and references on attached sheet are on record with Washington Closure Hanford, Inc., Document Control. Above noted regulatory requirements have been attained.

WCH Project Manager	Date	WCH Project Engineer	Date	DOE Project Manager	Date
Stacey Callin for JD Fancher	8-23-07	Stacey Callin	8-23-07		8/27/07

Given the attached information, DOE can proceed with backfill of the site with minimal risk. Final approval that the site has met RAOs and RAGs will occur with the submittal, review, and approval of the Cleanup Verification Package by the lead regulatory agency.

EPA Project Manager	Date	Ecology Project Manager	Date
	8/29/07	N/A	N/A

Backfill Concurrence Checklist Attachments/References

Attachment/ Reference	Description
A	118-F-5 Burial Ground Cleanup Verification 95% UCL Calculation, Calculation No. 0100F-CA-V0289
B	118-F-5 Burial Ground Shallow Zone and Overburden Sample Design, Calculation No. 0100F-CA-V0291
C	118-F-5 Burial Ground Cleanup Verification using Generic Dose-equivalence Lookup Values
D	118-F-5 GPERS Radiological Survey Map

Attachment 11

AIR MONITORING PLAN FOR THE 100-F AREA BURIAL GROUNDS AND REMAINING SITES REMEDIAL, ACTION
September 2007

1.0 INTRODUCTION

Remedial action (i.e., cleanup) of the burial grounds and remaining sites in the 100-F Area has the potential to emit radioactive particulates. This activity is being conducted under the *Comprehensive Environmental Response, Compensation, and Liability Act of1 980* (CERCLA) and the *Proposed Plan for the I00 Area Burial Grounds Interim Remedial Action* (DOE-RL 2000b). Quantification of radioactive emissions, implementation of best available radionuclide control technology (BARCT), and air monitoring have been identified as substantive requirements (i.e., applicable or relevant and appropriate requirements) for the remedial action. A BARCT compliance demonstration is determined by the regulatory agency on a case-by-case basis. The U.S. Department of Energy (DOE) will demonstrate compliance with the substantive requirements to the U.S. Environmental Protection Agency (EPA) upon request.

This air monitoring plan is prepared to demonstrate compliance with these substantive requirements in accordance with *Washington Administrative Code* (WAC) 246-247 and 40 *Code of Federal Regulations* (CFR) 61.

1.1 PLANNED ACTIVITIES

This remedial action workscope is for the removal and disposal of waste material and associated soil from burial grounds and the remaining wastes located in the 100-F Area. Also included is test pitting, trenching, and drilling to further characterize the buried waste and or to determine the limits of some of the burial grounds and remaining sites. Test pitting and trenching to support characterization may begin before remediation to assist in verifying design parameters (e.g., geophysical data) and will continue for the life of the remediation project.

The workscope includes remediation of the following burial grounds in the 100-F Area: 118-F-1, 118-F-2, 118-F-3, 118-F-5, 118-F-6, 118-F-7, 118-F-9, and 100-F-20. The scope of work also includes remediation of the following remaining sites: 100-F-31, 100-F-33, 116-F-8, 116-F-15, 116-F-16, 126-F-2, 128-F-2, 132-F-1, 141-C, 182-F, 1607-F3, 1607-F4, 1607-F5, 1607-F7, 100-F-26:4, 100-F-26:9, 100-F-26:10, 100-F-26:11, 100-F-26:12, 100-F-26:13, 100-F-26:14, 100-F-26:15, and 100-F-36. Should any nonradioactive sites contain radioactivity, this air monitoring plan will cover those sites based on concurrence from the lead regulator.

The remaining waste sites are composed of two types of sites: remove/treat/and dispose (RTD) sites and confirmatory sampling effort (CSE) sites. The RTD sites will be removed, treated (if necessary), and disposed. The CSE sites will be sampled by test pitting, trenching, and/or boring and, depending on the analytical results, will be left in

place or will become RTD sites. For the purposes of this plan, it is assumed that all CSE sites will become RTD sites.

The general strategy for remediation of the 100-F Burial Grounds and remaining sites is to excavate the waste materials and soils contained in the waste sites, sort out any dangerous waste that may be present, load the nondangerous (but radiologically contaminated) portion of soil and debris into containers, and haul the containers to the Environmental Restoration Disposal Facility (ERDF) for disposal. Dangerous wastes that require treatment will be staged within the area of contamination or other onsite areas approved by the EPA, treated (if required), and disposed in accordance with the CERCLA Record of Decision. Debris that exceeds size limits for shipment in ERDF containers or disposal at ERDF will be crushed or cut (e.g., using shears or torch) and then shipped to ERDF.

The equipment being used for characterization and remediation activities is considered standard equipment for excavating, cutting, sorting, loading, and hauling. The loading of contaminated soil and debris into waste containers may result in soil spilled on the waste containers and/or haul trucks. Haul trucks with loaded containers will enter a survey station where they will be surveyed to detect exterior contamination. A decontamination station will be established to decontaminate containers, haul trucks, and equipment, as required. Waste containers, haul trucks, and/or equipment will be decontaminated by conventional means such as brushing or wiping, or with high-efficiency particulate air (HEPA)-filtered vacuum cleaners. The HEPA-filtered vacuum cleaners may also be used (as needed) to decontaminate other equipment or to pick up other loose contaminated materials. More aggressive decontamination methods (e.g., grinding or wet-grit blasting) may be used for decontamination if the other methods fail. Decontaminated trucks and containers will then proceed to the container staging area where the transportation subcontractor will pick up the containers for transport to ERDF.

2.0 AIRBORNE SOURCE INFORMATION

There is a potential for particulate radioactive airborne emissions to result from remediation of the 100-F Burial Grounds and remaining sites. The primary radiological isotopes found within the burial grounds include cobalt-60, europium- 152, europium-154, plutonium-239, and strontium-90. The primary radiological isotopes found within the remaining sites include americium-24 1, cobalt-60, plutonium-238, plutonium-239/240, uranium-233/234, and uranium-238. The concentrations of the isotopes listed in Attachments 1 and 2 represent those that were determined to exist in the burial grounds and remaining sites. Other isotopes may also be encountered during remedial action activities; however, it is expected that the isotopic concentrations listed in Attachments 1 and 2 represent the upper bound of what will actually be found during remedial actions, and the estimates provided here are conservative.

2.1 INVENTORY

The radionuclide inventory and subsequent potential emission calculations for the 1 QO-F Area Burial Grounds and remaining sites are summarized in Attachments 1 and 2. The remaining sites inventory was developed based on the *Preliminary Hazard Classification for the Remediation of the 100-F/FR Area Remaining Sites* (Remove-Treat-Dispose) (BHI 2000), *Preliminary Hazard Classification for the Remediation of the 100-F/FR Area Remaining Sites* (Confirmatory Sampling Effort) (BHI 2003), *Industrial Hazard Classification for the 100F Remaining Sites* (BHI 2005), and *Estimated Volumes of 100F Area Remaining Sites* (BHI 2005a).

The remaining sites inventory was developed based on the *Preliminary Hazard Classification for the Remediation of the IOO-F/FR Area Remaining Sites (Remove-Treat-Dispose)* (BHI *2000)* and the *Preliminary Hazard Classification for the Remediation of the 100-F/FR Area Remaining Sites (Confirmatory Sampling Effort)* (BHI 2003c).

While several different waste forms are expected in the burial grounds it is conservatively assumed the entire inventory is in particulate form with a release fraction of 1.0 E-03, except for gases, torch cutting, and HEPA filtered vacuums.

There are objects in the burial grounds that may need to be size-reduced prior to transportation to ERDF. For calculation purposes, it is assumed that all size reduction will be accomplished with a cutting torch, and a release fraction of 1 is applied to the inventory. It is assumed that 1% of the total burial ground inventory will use torch cutting, and .21% of this inventory will use a release fraction of 1 (total inventory x 1% x .21% = torch cutting inventory).

The remaining sites are likely to contain contaminated soil or soil mixed with debris. For conservatism, it was assumed that the remaining sites inventory is in the form of particulates (soil). It was also assumed that cutting torches will be used to segment debris in the remaining sites. It was conservatively assumed that 0.21% of the remaining sites' inventory will be impacted by a torch with a release fraction of 1.

In addition, it is assumed that 0.10% of the particulate inventory in either the burial grounds or remaining sites will be picked up through a HEPA-filtered vacuum. A release fraction of 1 is applied to the HEPA vacuum inventory.

The CAP88-PC model was used to determine the annual total effective dose equivalent (TEDE) to maximally exposed individual (MEI). The appropriate release fraction was applied to the inventory of the various wastes to calculate the potential-to-emit. The calculated potential-to-emit (curies per year) was the input used for the computer model, and the model generated the annual unabated dose. The distance to the MEI used in the model was approximately 10,314 m (33,838 ft) east-southeast for the remaining sites and 9,514 m (31,206 ft) east of the burial grounds. The CAP88-PC model summary and synopsis for burial ground and remaining sites remediation are presented in calculation

0100F-CA-V0238 and 0100F-CA-V0193, Rev. 0 and Rev.1 (WCH 2005, BHI-203f, BHI-2005b), respectively. The calculated total unabated annual TEDE to the MEI from the 100-F burial grounds and remaining site remedial action is 3.77×10^{-1} mrem/yr and 9.76×10^{-2} mrem/yr, respectively, for a combined total of 4.75×10^{-1} mrem/yr.

3.0 BEST AVAILABLE RADIONUCLIDE CONTROL TECHNOLOGY

The following is the BARCT to be implemented during the 100-F Area Burial Grounds and remaining sites remedial action.

3.1 APPLICATION OF DUST SUPPRESSANTS

- Water will be applied during excavation, container loading, and backfilling processes to minimize and control airborne releases.

- Soil fixatives will be applied to any contaminated soils and debris that will be inactive for more than 24 hours.

- Fixatives will be applied to contaminated soils and debris that will be inactive less than 24 hours at the end of work operations if the sustained wind speed is predicted overnight to be greater than 32 km/hr (20 mph) based on the Hanford Meteorological Station morning forecast. This will allow the project enough time, if necessary, to prepare for the application of dust control measures. If a soil fixative has already been applied and the soil will remain undisturbed, further use of fixatives will not be needed. The fixatives or other controls will not be applied when the contaminated soils are frozen, or it is raining, snowing, or other freezing precipitation is falling at the end of work operations.

- Appropriate documentation on the application of dust suppressants to comply with BARCT shall be maintained to support a compliance demonstration (e.g., logbook or other project specific documentation).

- The haul trucks will be covered to contain the materials while in transit to ERDF.

3.2 HEPA-FILTERED VACUUM CLEANERS

The vacuum cleaners are equipped with HEPA filters, which are considered BARCT for radioactive emissions at the Hanford Site. The HEPA filters will be efficiency tested. Radiological surveys on the outlet of the vacuum will be performed to verify HEPA filter function.

4.0 MONITORING

Monitoring activities will consist of establishing near-facility air monitoring stations upwind and downwind of the 100-F Area Burial Grounds and remaining sites. Five downwind monitors will be used to monitor emissions from the 100-F Burial Grounds and remaining sites remedial action. The locations of these monitors, as identified in Figure 1, are based on the predominant wind directions. The existing air monitoring station #24 located just south of 100-F Area (not shown in Figure l); will be used as the upwind air monitoring station.

Near-facility air monitoring is the means/methods to measure emissions. The Hanford Site protocol established for near-facility monitors will be followed for data collection, sampling frequencies, and sample analysis (DOE-RL 2000a). The data from these air monitors will be included in the appropriate annual reports prepared for the Hanford Site.

Air monitor downtime will be minimized and all air monitors shall be operated, as required. However, if a downwind air monitor is out of operation for more than 48 hours during normal work operations (e.g., excavating and loading radioactive contaminated material), the EPA will be notified. If two or more downwind air monitors are out of operation during normal work operations, excavation and loading activities shall be temporarily suspended until operation of at least two downwind air monitors are restored or backup equipment is deployed. Normal work operations are not allowed if two or more downwind monitors are not operating.

Air monitoring will no longer be required when excavation of the burial grounds and remaining sites has been completed and verification samples indicate that the remediation goals have been met.

Soil deposition samples (analyzed for plutonium-238, plutonium-239, plutonium-240, strontium-90, uranium, and gamma-emitting radionuclides) will be taken close to the downwind air monitors before, during, and after remediation. The soil samples will be taken to evaluate the long-term trends in the environmental accumulation of radioactivity.

Characterization (test pitting and trenching, possibly with soil sampling) may be conducted prior to the start of remediation for the purpose of confirming interpretations of geophysical data. These characterization activities will be conducted in areas identified by geophysical methods as being outside the limits of buried debris. If near-facility air monitoring is not being conducted during this pre-remediation characterization, then routine radiological control surveys will be performed.

Characterization activities associated with "orphan sites" pose little to no potential to emit (PTE) radiological materials to the public. If an appreciable radiological inventory is encountered during characterization activities the Best Available Radiological Control Technologies (BARCT) as identified in this plan will be implemented.

5.0 REFERENCES

40 CFR 61, "National Emission Standards for Hazardous Air Pollutants," *Code of Federal Regulations,* as amended.

BHI, 2000, *Preliminary Hazard Classification for the Remediation of the 100-F/FR Area Remaining Sites (Remove-Treat-Dispose),* BHI-01389, Rev. *0,* Bechtel Hanford, Inc., Richland, Washington.

BHI, 2003a, *Inventory Evaluation for Waste Sites < Category 3,* Calculation 0000X-CA-N0006, Rev. 0, Bechtel Hanford, Inc., Richland, Washington.

BHI, 2003b, *Preliminary Hazard Classification,* PHC-2003-0002, Bechtel Hanford, Inc., Richland, Washington.

BHI, 2003c, *Preliminary Hazard Classification for the Remediation of the 100 -F/FR Area Remaining Sites (Confirmatory Sampling Effort),* BHI-01395, Rev. 2, Bechtel Hanford, Inc., Richland, Washington.

BHI, 2003d, *Sum of Ratios for < Cat 3 Wastes Sites by Analogy to Other Sites,* Calculation 0000X-CA-N0003, Rev. 0, Bechtel Hanford, Inc., Richland, Washington.

BHI, 2003f, *Total Effective Dose Equivalent Calculation for 100-F Remaining Sites Remediation,* Calculation No. 01 OOF-CA-VO193, Rev. 0, Bechtel Hanford, Inc., Richland, Washington.

BHI, 2005, *Industrial Hazard Classification for the 100F Remaining Sites*, Bechtel Hanford, Inc. Richland, Washington

BHI, 2005a, Estimated *Volumes of 100F Area Remaining Sites*, Calculation 0100F-CA-C0011, Rev. 0, Bechtel Hanford Inc., Richland, Washington

BHI- 2005b, Total *Effective Dose Equivalent Calculation for the 100-F Remaining Sites Remediation*, Calculation 0100F-CA-V0193, Rev. 1, Bechtel Hanford Inc., Richland, Washington

Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. 9601, et seq.

DOE-RL, 2000a, *Environmental Monitoring Plan,* DOE/RL-91-50, Rev. 3, U.S. Department of Energy, Richland Operations Office, Richland, Washington.

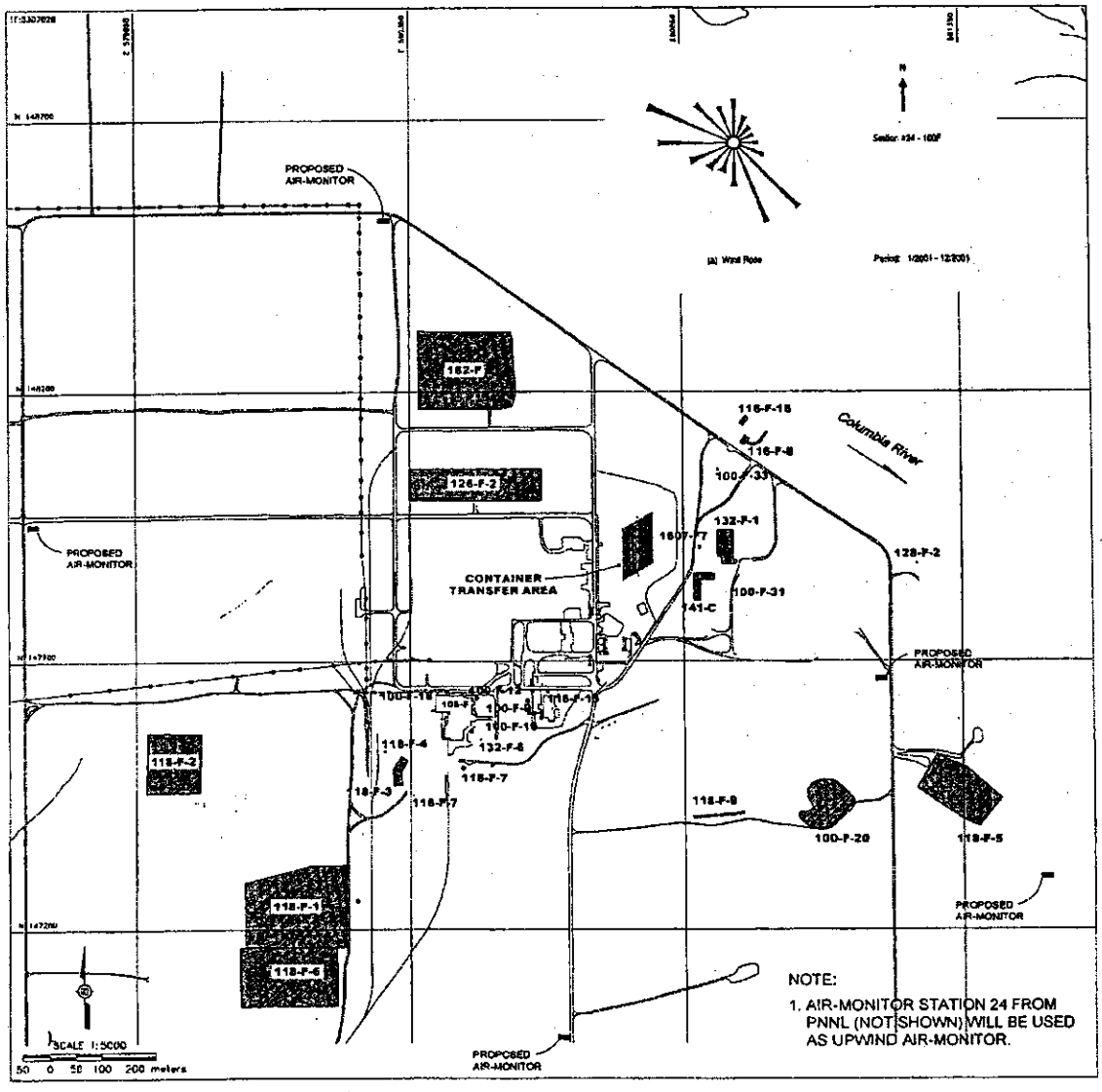
DOE-RL, 2000b, *Proposed Plan for the 100 Area Burial Grounds Interim Remedial Action,* DOE/RL-99-59, Rev. 1, U.S. Department of Energy, Richland Operations Office, Richland, Washington.

WAC 246-247, "Radiation Protection - Air Emissions," *Washington Administrative Code,* as amended.

WHC, 1987, *Estimates of Solid Waste Buried in the 100 Area Burial Grounds,* WHC-EP-0087, Westinghouse Hanford, Co., Richland, Washington.

WHC 2005, *Determination of Material at Risk for 100-F Burial Grounds,* 0100F-CA-V0238, Rev. 0, Washington Closure Hanford, Richland Washington.

Figure 1. 100-F Air Monitor Locations.



Attachment 1. Potential to Emit Values for the 100-F Burial Grounds

Potential-to-Emit Values for the 100-F Area Burial Grounds

Isotope	Inventory[1], Ci/yr				Potential to Emit, Ci/yr					Unabated TEDE to the MEI[3] (mrem/yr)
	Soil/Debris, Animal Waste and Fuel Oxide	Torch Cutting	HEPA Vacuum	Fuel Metal	Soil/Debris, Animal Waste and Fuel Oxide (1E-3 RF)[2]	Torch Cutting (1 RF)	HEPA Vacuum (1RF)	Fuel Metal (1E-6 RF)	Total	
Ag-108m	7.18E+01	1.51E-03	7.18E-02	0.00E+00	7.18E-02	1.51E-03	7.18E-02	0.00E+00	1.45E-01	--
Am-241	3.51E-03	7.35E-09	3.50E-07	3.15E+00	3.51E-06	7.35E-09	3.50E-07	3.15E-06	7.02E-06	1.40E-04
Ba-133	1.23E+00	2.58E-05	1.23E-03	0.00E+00	1.23E-03	2.58E-05	1.23E-03	0.00E+00	2.48E-03	1.61E-04
Ba-137m	8.11E+00	1.68E-04	8.01E-03	9.50E+01	8.11E-03	1.68E-04	8.01E-03	9.50E-05	1.64E-02	3.53E-11
C-14	5.27E+00	1.11E-04	5.27E-03	0.00E+00	5.27E-03	1.11E-04	5.27E-03	0.00E+00	1.06E-02	3.56E-05
Ca-41	8.00E-02	1.68E-06	8.00E-05	0.00E+00	8.00E-05	1.68E-06	8.00E-05	0.00E+00	1.62E-04	1.91E-09
Cd-113m	2.41E-05	0.00E+00	0.00E+00	2.41E-03	2.41E-09	0.00E+00	0.00E+00	2.41E-09	4.81E-09	0.00E+00
Cm-244	1.01E-04	2.13E-09	1.01E-07	0.00E+00	1.01E-07	2.13E-09	1.01E-07	0.00E+00	2.05E-07	2.16E-06
Co-60	5.60E+02	1.18E-02	5.60E-01	0.00E+00	5.60E-01	1.18E-02	5.60E-01	0.00E+00	1.13E+00	2.55E-01
Cs-137	8.57E+00	1.78E-04	8.47E-03	1.00E+02	8.57E-03	1.78E-04	8.47E-03	1.00E-04	1.73E-02	9.34E-04
Eu-152	4.66E+01	9.78E-04	4.66E-02	3.18E-04	4.66E-02	9.78E-04	4.66E-02	3.18E-10	9.42E-02	2.04E-02
Eu-154	4.86E+01	1.02E-03	4.86E-02	0.00E+00	4.86E-02	1.02E-03	4.86E-02	0.00E+00	9.81E-02	1.71E-02
H-3	1.51E+01	3.18E-04	1.51E-02	0.00E+00	1.51E+01	3.18E-04	1.51E-02	0.00E+00	1.52E+01	9.22E-04
I-129	6.37E-01	1.34E-05	6.37E-04	0.00E+00	6.37E-04	1.34E-05	6.37E-04	0.00E+00	1.29E-03	1.96E-04
Kr-85	1.43E-03	0.00E+00	0.00E+00	1.43E+00	1.43E-03	0.00E+00	0.00E+00	1.43E+00	1.43E+00	1.91E-07
Nb-94	4.00E-06	0.00E+00	0.00E+00	3.99E-03	4.00E-09	0.00E+00	0.00E+00	3.99E-09	7.99E-09	7.78E-09
Ni-59	1.76E+01	3.70E-04	1.76E-02	0.00E+00	1.76E-02	3.70E-04	1.76E-02	0.00E+00	3.56E-02	1.50E-05
Ni-63	2.01E+03	4.21E-02	2.01E+00	0.00E+00	2.01E+00	4.21E-02	2.01E+00	0.00E+00	4.05E+00	1.87E-03
Np-237	7.12E-03	1.50E-07	7.12E-06	0.00E+00	7.12E-06	1.50E-07	7.12E-06	0.00E+00	1.44E-05	2.62E-04
Pd-107	1.00E-07	0.00E+00	0.00E+00	9.99E-05	1.00E-10	0.00E+00	0.00E+00	9.99E-11	2.00E-10	1.19E-13
Pu-238	1.03E-03	2.00E-08	9.53E-07	7.88E-02	1.03E-06	2.00E-08	9.53E-07	7.88E-08	2.08E-06	2.50E-05
Pu-239	2.36E+00	4.94E-05	2.35E-03	5.99E+00	2.36E-03	4.94E-05	2.35E-03	5.99E-06	4.76E-03	6.17E-02
Pu-240	1.50E-03	0.00E+00	0.00E+00	1.49E+00	1.50E-06	0.00E+00	0.00E+00	1.49E-06	2.99E-06	3.87E-05
Pu-241	1.22E-02	0.00E+00	0.00E+00	1.21E+01	1.22E-05	0.00E+00	0.00E+00	1.21E-05	2.43E-05	4.94E-06
Ra-226	1.35E-02	2.83E-07	1.35E-05	0.00E+00	1.35E-05	2.83E-07	1.35E-05	0.00E+00	2.73E-05	1.94E-05
Se-79	1.00E-06	0.00E+00	0.00E+00	9.99E-04	1.00E-09	0.00E+00	0.00E+00	9.99E-10	2.00E-09	0.00E+00
Sm-151	1.59E-03	0.00E+00	0.00E+00	1.59E+00	1.59E-06	0.00E+00	0.00E+00	1.59E-06	3.17E-06	3.82E-09
Sr-90	6.05E+01	1.27E-03	6.04E-02	9.76E+01	6.05E-02	1.27E-03	6.04E-02	9.76E-05	1.22E-01	1.86E-02
Tc-99	5.10E-03	2.13E-09	1.01E-07	4.99E+00	5.10E-06	2.13E-09	1.01E-07	4.99E-06	1.02E-05	3.26E-07
U-233	5.25E-04	1.10E-08	5.25E-07	0.00E+00	5.25E-07	1.10E-08	5.25E-07	0.00E+00	1.05E-06	5.24E-06
U-238	3.00E-05	0.00E+00	0.00E+00	3.00E-02	3.00E-08	0.00E+00	0.00E+00	3.00E-08	6.00E-08	2.61E-07
Y-90	6.05E+01	1.27E-03	6.04E-02	9.76E+01	6.05E-02	1.27E-03	6.04E-02	9.76E-05	1.22E-01	4.08E-05
Zr-93	1.00E-05	0.00E+00	0.00E+00	9.99E-03	1.00E-08	0.00E+00	0.00E+00	9.99E-09	2.00E-08	4.20E-11
Total										3.77E-01

[1] Radionuclide inventories are presented in Calculation 0100F-CA-V0238, *Total Effective Dose Equivalent for the* Remedial Action of the 100-F Area Burial Grounds, Rev. 0, September 2005.

[2] Release fractions for H-3 and Kr-85 are assumed to be 1 in all cases.

[3] The annual unabated total effective dose equivalent was determined using the CAP88-PC, Version 2 model. The potential to emit (Ci/yr) was input to the model, and the model generated the annual unabated dose. The distance to the MEI for the 100-F Area Burial Grounds Remedial Action is 9,514 m east. The CAP88-PC model summary and synopsis are presented in Calculation 0100F-CA-V0238, *Total Effective Dose Equivalent for the Remedial Action of the 100-F Area Burial Grounds*, Rev. 0, September 2005.

MEI = Maximally exposed individual

TEDE = Total effective dose equivalent

RF = Release fraction

ATTACHMENT 2

Attachment 2

Potential-to-Emit Values for the 100-F Remaining Sites.

Isotope	Inventory[a] (Ci/yr)			Potential-to-Emit (Ci/yr)				Unabated TEDE to the MEI[c] (mrem/yr)
	Soil	Torch Cutting	HEPA Vacuum	Soil (1E-3 RF)[b]	Torch Cutting (1 RF)	HEPA Vacuum (1 RF)	Total	
H-3	2.01E-01	4.22E-04	2.01E-04	2.01E-01	4.22E-04	2.01E-04	2.01E-01	1.32E-05
C-14	1.45E-01	3.05E-04	1.45E-04	1.45E-04	3.05E-04	1.45E-04	5.95E-04	2.17E-06
K-40	4.86E-01	1.02E-03	4.86E-04	4.86E-04	1.02E-03	4.86E-04	1.99E-03	3.55E-04
Co-60	2.68E+01	5.63E-02	2.68E-02	2.68E-02	5.63E-02	2.68E-02	1.1E-01	2.49E-02
Ni-63	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90	9.02E+00	1.9E-02	9.02E-03	9.02E-03	1.9E-02	9.02E-03	3.70E-02	5.66E-03
Y-90	9.02E+00	1.9E-02	9.02E-03	9.02E-03	1.9E-02	9.02E-03	3.70E-02	1.24E-05
Cs-134	1.06E-03	2.23E-06	1.06E-06	1.06E-06	2.23E-06	1.06E-06	4.35E-06	5.40E-07
Cs-137	2.38E+00	5.00E-03	2.38E-03	2.38E-03	5.00E-03	2.38E-03	9.76E-03	5.29E-04
Ba-137m	2.25E+00	4.73E-03	2.25E-03	2.25E-03	4.73E-03	2.25E-03	9.24E-03	1.30E-11
Eu-152	2.09E+00	4.39E-03	2.09E-03	2.09E-03	4.39E-03	2.09E-03	8.58E-03	1.86E-03
Eu-154	1.74E+00	3.65E-03	1.74E-03	1.74E-03	3.65E-03	1.74E-03	7.13E-03	1.25E-03
Eu-155	1.73E-01	3.63E-04	1.73E-04	1.73E-04	3.63E-04	1.73E-04	7.08E-04	5.51E-06
Ra-226	2.39E-01	5.02E-04	2.39E-04	2.39E-04	5.02E-04	2.39E-04	9.79E-04	7.00E-04
Ra-228	3.91E-02	8.21E-05	3.91E-05	3.91E-05	8.21E-05	3.91E-05	1.60E-04	4.68E-05
Th-228	3.34E-02	7.00E-05	3.34E-05	3.34E-05	7.00E-05	3.34E-05	1.37E-04	1.21E-03
Th-232	4.08E-02	8.57E-05	4.08E-05	4.08E-05	8.57E-05	4.08E-05	1.67E-04	2.12E-03
U-233/234	1.87E-01	3.93E-04	1.87E-04	1.87E-04	3.93E-04	1.87E-04	7.66E-04	3.80E-03
U-235	2.51E-02	5.26E-05	2.51E-05	2.51E-05	5.26E-05	2.51E-05	1.03E-04	4.79E-04
U-238	5.59E-01	1.17E-03	5.59E-04	5.59E-04	1.17E-03	5.59E-04	2.29E-03	1.00E-02
Pu-239/240	5.64E-01	1.18E-03	5.64E-04	5.64E-04	1.18E-03	5.64E-04	2.31E-03	3.01E-02
Am-241	1.54E-01	3.23E-04	1.54E-04	1.54E-04	3.23E-04	1.54E-04	6.30E-04	1.26E-02
Pu-238	4.08E-02	8.57E-05	4.08E-05	4.08E-05	8.57E-05	4.08E-05	1.67E-04	2.01E-03
Total								9.76E-02

[a] Radionuclide inventories are presented in *Total Effective Dose Equivalent Calculation for 100-F Remaining Sites Remediation*, Calculation 0100F-CA-V0193, (BHI 2005b).

[b] Release fraction for H-3 is assumed to be 1 in all cases.

[c] The annual unabated TEDE was determined using the CAP88-PC, Version 2 model. The potential to emit (Ci/yr) was input to the model, and the model generated the annual unabated dose. The distance to the MEI for the 100-F Remaining Sites remedial action is 10,314 m (33,838 ft) east-southeast. The CAP88-PC model summary and synopsis are presented in *Total Effective Dose Equivalent Calculation for 100-F Remaining Sites Remediation*, Calculation 0100F-CA-V0193, (BHI 2005b).

HEPA = high-efficiency particulate air
MEI = maximally exposed individual
RF = release fraction
TEDE = total effective dose equivalent

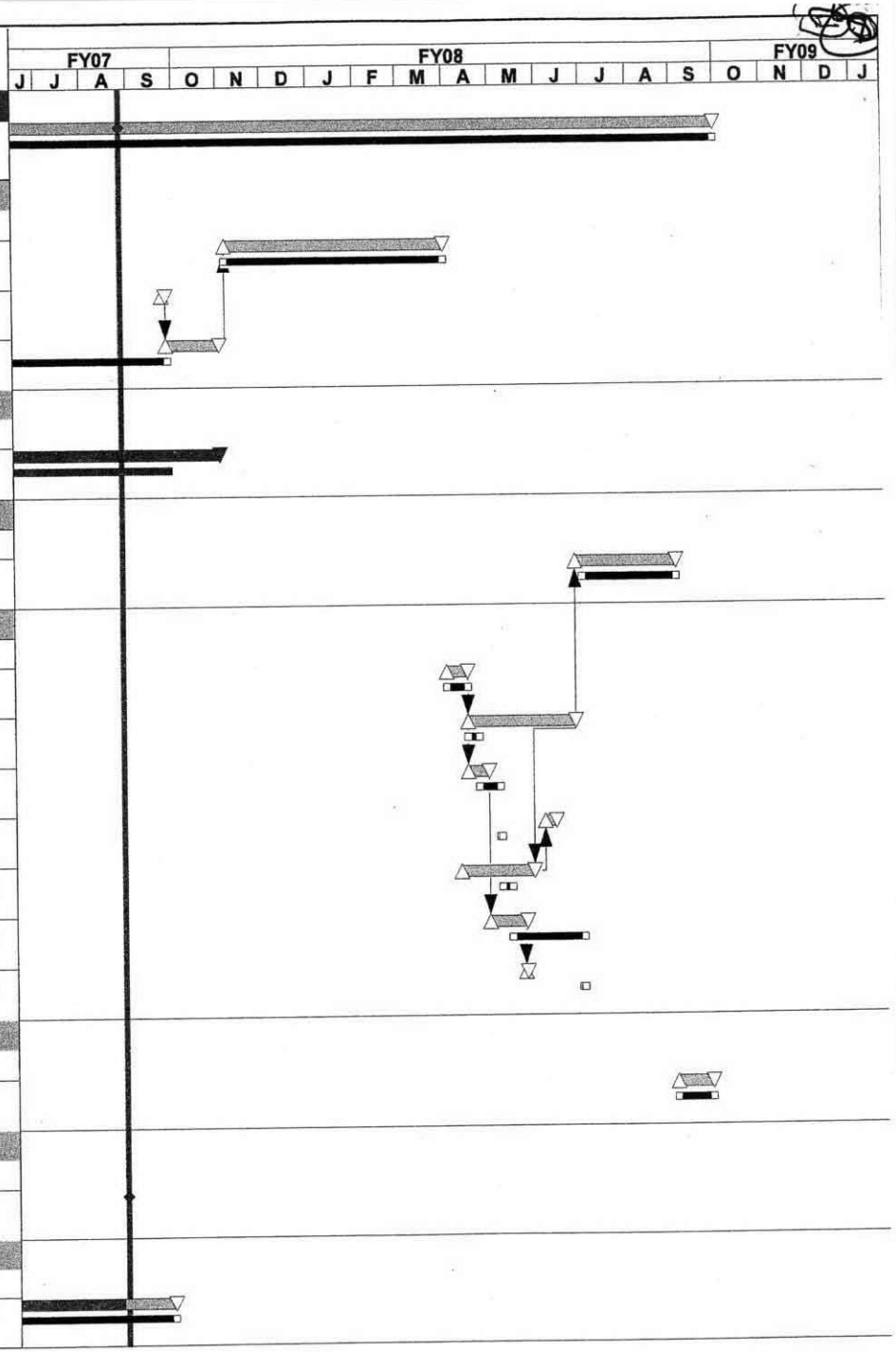
Approvals

Chris Smith, Department of Energy Richland Operations — Date: 9/11/07

Rod Lobos, Environmental Protection Agency — Date: 9/12/07

Attachment 12

Activity ID	Activity Description	EVI	% Comp	Rem Dur	Early Start	Early Finish
FKC7 FY06 CPP 100K AREA FR CURRENT						
Total			31	220	02OCT06A	30SEP08
1.03.05.03.06.02.01 Excavation process						
CEC0602A Excavation - Rem BG - 118-K-1						
RK18K16030	Anomalies Deferred with BCWS (ICP 20)	MA	0	79	05NOV07*	31MAR08
RKICP20100	118-K-1 Excavation (ICP 20)	P13	0	3	24SEP07	26SEP07
RKICP20110	118-K-1 Excavation over IPB qty. (ICP 20)	P13	0	21	27SEP07	01NOV07
1.03.05.03.06.02.02 Loadout						
CEC0602B Loadout - Rem BG - 118-K-1						
RK18K18070	118-K-1 Loadout over IPB qty. (ICP 20)	P8	30	39	26MAR07A	01NOV07
1.03.05.03.06.02.03 Backfill						
CEC0602C Backfill - Rem BG - 118-K-1						
RK18K18030	Backfill 118-K-1 Trenches (61,554 BCM)	P13	0	37	26JUN08	02SEP08
1.03.05.03.06.02.04 Closeout Sampling & Documentation						
CEC0602D Closeout Smplg - Rem BG - 118-K-1						
RK18K12020	Sample Design - 118-K-1	MA	0	8	01APR08	14APR08
RK18K12030	Prepare Closure Document	MA	0	41	15APR08	25JUN08
RK18K12040	Variance Analysis - 118-K-1 Burial Ground	MA	0	8	15APR08	28APR08
RK18K12050	RL/Reg Sign Rev. 0 Closure Doc	MA	0	5	05JUN08	12JUN08
RK18K12060	RL/Reg Review Draft A Closure Doc	MA	0	26	10APR08	27MAY08
RK18K12070	Confirmation Analysis 118-K-1 Burial Ground	MA	0	15	29APR08	22MAY08
RK18K12590	Confirmation Sampling Calculations 118-K-1	MA	0	1	22MAY08	22MAY08
1.03.05.03.06.02.05 Revegetation						
CEC0602E Revegetation - Rem BG - 118-K-1						
RKSAGE2030	Purchase Sage Brush for 118-K-1 in FY06 for FY07	P21	0	15	02SEP08*	25SEP08
1.03.05.75.25 Fld. Rem.-100K Non Site Specific Support						
CER25_57 TPA M-16-57 Init Soil Remediation K East Basin						
CER25_57	TPA M-16-57 Init Soil Remediation K		0	0	27AUG07*	
1.03.05.75.25.01.01 Fld. Rem.-100K Non Site Specific Support						
CER2501A3 Fld. Rem.-100K Non Site Specific Support						
RKDPM60210	118-K-1 FY07 Project Support	LOE	91	19	02OCT06A	27SEP07



Start Date 29AUG05
Finish Date 30APR13
Data Date 27AUG07
Run Date 06SEP07 11:50

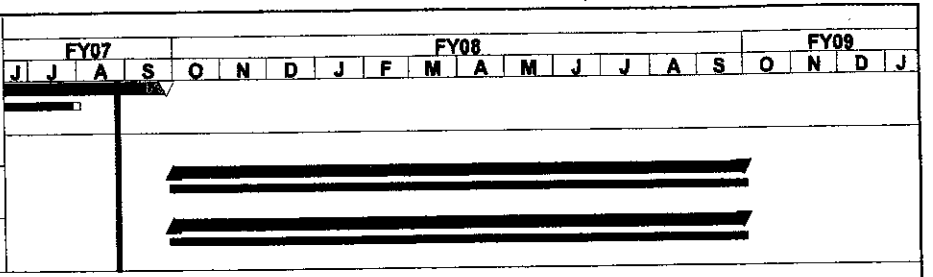
Early Bar
Early Bar
Progress Bar
Critical Activity

FKC7

WASHINGTON CLOSURE HANFORD

100-K
(FY07 & FY08)

Activity ID	Activity Description	EVT	% Comp	Rem Dur	Early Start	Early Finish
RKSUBOPS10	Subcontractor Monthly Ops FY07	LOE	96	19	02OCT06A	27SEP07
CER2501A4 Fld. Rem.-100K Non Site Specific Support						
RKDPM60220	118-K-1 FY08 Project Support	LOE	0	201	01OCT07*	30SEP08
RKDPM60240	Sub O&O	MA	0	201	01OCT07*	30SEP08



Attachment 13

Field Remediation

Sample Design and Cleanup Verification for the September 2007 UMM

AREA	DOE-RL/REGULATOR DELIVERABLE	START	FINISH
300 Area			
	RL/Regulator Review Draft A WI for 600-243	**8/28/2007**	10/16/2007
	Design Eng ESD (FY07) RL/Reg Briefing	9/13/2007	9/17/2007
	Design Eng ESD (FY07) RL/Ecology Rev of Draft A	9/19/2007	10/11/2007
	RL/Regulator Review Draft A WI for 300-275	10/3/2007	11/19/2007
	RL/Regulator Review Draft A WI for 300-274	10/18/2007	12/3/2007
	Design Eng ESD (FY07) Public Review	10/30/2007	11/29/2007
	RL/Regulator Review Draft A WI for 300-32	12/12/2007	1/14/2008
	Design Eng ESD (FY07) Approval from EPA/Ecology	12/13/2007	1/22/2008
	RL/Regulator Review Draft A WI for 300-2	1/3/2008	1/30/2008
	RL/Regulator Review Draft A WI for 303-M UOF	1/9/2008	2/5/2008
	RL/Regulator Review Draft A WI for 600-276	1/15/2008	2/11/2008
	RL/Regulator Review Draft A WI for UPR-300-2	1/21/2008	2/14/2008
	Design Engineering RDR DOE/Reg Review(FY08)	2/5/2008	3/25/2008
	RL/Reg Review of Draft A Closeout Document 600-243	2/13/2008	3/31/2008
	RL/Reg Review of Draft A Closeout Document 300-275	2/26/2008	4/9/2008
	DOE Review of 300 Area Cultural Review	4/3/2008	5/7/2008
	RL/Reg Review of Draft A Closeout Document 300-274	4/8/2008	5/21/2008
	Design Engineering RDR Issue (FY08)	5/21/2008	5/28/2008
	RL/Reg Review Draft A Closure Doc for 300-32	6/16/2008	7/30/2008
	RL/Regulator Review Draft A WI for 618-13	6/24/2008	7/28/2008
	RL/Reg Review Draft A Closure Doc for 300-2	7/2/2008	8/18/2008
	RL/Reg Review Draft A Closure Doc for 303-M UOF	7/9/2008	8/21/2008
	RL/Reg Review Draft A Closure Doc for 600-276	7/15/2008	8/27/2008
	RL/Reg Review Draft A Closure Doc for UPR-300-2	7/16/2008	8/28/2008
	RL/Regulator Approval of 300 Area Air Monitoring Plan	8/26/2008	9/30/2008
100-BC			
	RL/Regulator Review Draft A WI for (100-B-22)	8/27/2007	9/11/2007
	RL/Regulator Review Draft A WI for (100-B-23)	8/27/2007	9/11/2007
	RL/Regulator Review Draft A WI for (1607-B5)	8/27/2007	9/11/2007
	RL/Regulator Review Draft A WI for (100-B-21:2)	9/19/2007	11/5/2007
	116-C-3 RL/Regulator Review Draft A WI	10/8/2007	10/11/2007
	116-C-3 RL/Reg review of Draft A Closeout Doc.	10/16/2007	10/23/2007
	RL/Regulator Review Draft A WI for (100-B-19)	10/23/2007	11/19/2007
	118-B-1 RL/Reg Rev of Draft A Closeout Doc (SP)	11/5/2007	12/26/2007
100-D			
	RL/Regulator Review Draft A WI for 120-D-2	8/30/2007	9/27/2007
	RL/Reg Review Draft A Closure Doc for 100-D-33	9/24/2007	11/7/2007
	RL/Reg Review Draft A Closure Doc for 100-D-35	9/24/2007	11/7/2007
	RL/Reg Review Draft A Closure Doc for 100-D-40	9/24/2007	11/7/2007
	RL/Reg Review Draft A Closure Doc for 100-D-41	9/24/2007	11/7/2007
	RL/Regulator Review Draft A WI for 100-D-30	9/24/2007	11/7/2007
	RL/Regulator Review Draft A WI for 126-DR-1	10/15/2007	11/28/2007
	RL/Reg review of Draft A Closeout Doc 100-D-50:1	10/15/2007	11/28/2007
	RL/Regulator Review Draft A WI for 100-D-32	12/13/2007	1/15/2008
	RL/Regulator Review Draft A WI for 100-D-43	12/19/2007	1/21/2008
	RL/Regulator Review Draft A WI for 100-D-3	12/31/2007	1/28/2008
	RL/Regulator Review Draft A WI for 100-D-56	1/2/2008	2/14/2007
	RL/Regulator Review Draft A WI for 100-D-45	1/7/2008	1/22/2008
	RL/Reg Review Draft A Closure Doc for 100-D-30	1/10/2008	2/15/2008
	RL/Reg Review Draft A Closure Doc for 126-DR-1	2/11/2008	3/26/2008

Field Remediation
Sample Design and Cleanup Verification for the September 2007 UMM

AREA	DOE-RL/REGULATOR DELIVERABLE	START	FINISH
100-D continued			
	DOE Review of 100-D Failed Sites Cultural Review	2/19/2008	3/24/2008
	RL/Reg Review Draft A Closure Doc for 100-D-2	2/20/2008	3/26/2008
	RL/Reg Review Draft A Closure Doc for 120-D-2	2/28/2008	3/26/2008
	RL/Regulator Review Draft A WI for 118-D-4	3/5/2008	4/1/2008
	RL/Regulator Review Draft A WI for 100-D-47	6/4/2008	7/1/2008
	RL/Reg Review Draft A Closure Doc for 100-D-32	6/12/2008	7/8/2008
	RL/Reg Review Draft A Closure Doc for 100-D-32	6/17/2008	7/8/2008
	RL/Reg Review Draft A Closure Doc for 100-D-45	6/17/2008	7/31/2008
	RL/Regulator 100-D Failed Confirmatory Sites Air Montoring Pl	7/10/2008	8/13/2008
	RL/Reg Review Draft A Closure Doc for 100-D-43	7/31/2008	9/16/2008
	RL/Reg Review Draft A Closure Doc for 100-D-3	8/7/2008	9/23/2008
	RL/Reg Review Draft A Closure Doc for 118-D-4	8/14/2008	9/30/2008
	RL/Regulator Review Draft A WI for 118-D-1	9/3/2008	9/30/2008
	RL/Regulator Review Draft A WI for 118-DR-1	9/23/2008	11/5/2008
	RL/Reg Review Draft A Closure Doc for 100-D-47	9/29/2008	11/11/2008
100-F			
	RL/Reg Review Draft A WI for 1607-F1	**8/9/2007**	9/12/2007
	RL/Reg Review Draft A Closure Doc for Pipeline	8/27/2007	9/27/2007
	RL/Reg Review Draft A Closure Doc for 118-F-2	9/17/2007	9/27/2007
	RL/Reg Review Draft A Closure Doc for 118-F-8	10/1/2007	11/13/2007
	RL/Reg review of Draft A Closeout Docm. 128-F-2	10/1/2007	11/13/2007
	RL/Reg Review Draft A Closure Doc for 118-F-2	10/9/2007	11/7/2007
	RL/Reg Review Draft A Closure Doc for 118-F-1	10/10/2007	11/27/2007
	RL/Reg Review Draft A Closure Doc for 118-F-5	10/11/2007	11/28/2007
	RL/Regulator Review Draft A WI 120-F-1	10/27/2007	12/10/2007
	RL/Reg Review Draft A Closure Doc for 1607-F1	11/8/2007	12/31/2007
	RL/Reg Review Draft A Closure Doc for 1607-F-4	11/8/2007	12/31/2007
	RL/Reg review of Draft A Closeout Docm. 118-F-6	11/27/2007	12/26/2007
	RL/Reg Review Draft A Closure Doc for 100-F-45	1/10/2008	2/26/2008
	RL/Reg Review Draft A Closure Doc for 100-F-54	1/17/2008	3/4/2008
	RL/Reg Review Draft A Closure Doc for 100-F-50	1/21/2008	3/5/2008
	RL/Reg Review Draft A Closure Doc for 100-F-51	1/22/2008	3/6/2008
	RL/Reg Review Draft A Closure Doc for 100-F-52	1/24/2008	3/11/2008
	RL/Reg Review Draft A Closure Doc for 100-F-48	1/29/2008	3/13/2008
	RL/Reg Review Draft A Closure Doc for 100-F-53	1/31/2008	3/18/2008
	RL/Reg Review Draft A Closure Doc for 100-F-46	2/6/2008	3/24/2008
	RL/Reg Review Draft A Closure Doc for 100-F-44:2	2/12/2008	3/27/2008
	RL/Reg Review Draft A Closure Doc for 100-F-44:4	2/12/2008	3/27/2008
	RL/Reg Review Draft A Closure Doc for 100-F-44:5	2/12/2008	3/27/2008
	RL/Reg Review Draft A Closure Doc for 100-F-44:8	2/12/2008	3/27/2008
	RL/Reg Review Draft A Closure Doc for 100-F-57	2/12/2008	3/27/2008
	RL/Reg Review Draft A Closure Doc for 100-F-49	2/21/2008	4/7/2008
100-H			
	RL/Reg Review Draft A Closure Doc for 128-H-2	**7/20/2007**	9/4/2007
	RL/Reg Review Draft A Closure Doc for 128-H-3	**7/20/2007**	9/4/2007
	100-H DOE Review Bid	12/6/2007	1/6/2008
	100-H Award Subcontract	1/7/2008	1/7/2008
	RL/Regulator Review Draft A WI for 116-H-9	3/6/2008	4/2/2008
	RL/Regulator Review Draft A WI for 600-152	4/21/2008	5/15/2008
	RL/Reg Review Draft A Closure Doc for 100-H-28:2	8/14/2008	9/30/2008

Field Remediation
Sample Design and Cleanup Verification for the September 2007 UMM

AREA	DOE-RL/REGULATOR DELIVERABLE	START	FINISH
100-H continued			
	RL/Reg Review Draft A Closure Doc for 100-H-28:3	8/20/2008	10/6/2008
	RL/Reg Review Draft A Closure Doc for 100-H-28:4	8/26/2008	10/9/2008
	RL/Reg Review Draft A Closure Doc for 100-H-28:5	9/2/2008	10/15/2008
	RL/Reg Review Draft A Closure Doc for 100-H-3	9/8/2008	10/21/2008
	RL/Regulator Review Draft A WI for 118-H-6	9/8/2008	10/2/2008
	RL/Reg Review Draft A Closure Doc for 100-H-4	9/11/2008	10/27/2008
	RL/Regulator Review Draft A WI for 116-H-5	9/16/2008	10/13/2008
	RL/Reg Review Draft A Closure Doc for 100-H-7	9/17/2008	10/30/2008
	RL/Regulator Review Draft A WI for 100H Mud D	9/18/2008	10/15/2008
100-N			
	ESD - Public Review of Draft B of 118-B-1	**8/27/2007**	9/26/2007
	ESD - RL/Regulator Review of Draft 100 Area	**8/27/2007**	11/14/2007
	ESD - Public Review of Draft B 100 Area	11/15/2007	1/15/2008
	RL/Regulator Review Draft A WI for 100-N-28	11/28/2007	12/27/2007
	RL/Regulator Review Draft A WI for 100-N-53	12/5/2007	1/7/2008
	RL/Regulator Review Draft A WI for 100-N-55	12/12/2007	1/14/2008
	RL/Regulator Review Draft A WI for 100-N-65	12/19/2007	1/21/2008
	RL/Regulator Review Draft A WI for 100-N-66	12/31/2007	1/28/2008
	RL/Regulator Review Draft A WI for 100-N-68	1/8/2008	2/4/2008
	RL/Regulator Review Draft A WI for 100-N-79	1/15/2008	2/11/2008
	RL/Regulator Review Draft A WI 100-N-62 Pipes	1/22/2008	2/19/2008
	RL/Regulator Review Draft A WI for 120-N-4	1/22/2008	2/19/2008
	RL/Regulator Review Draft A WI for 628-2	1/22/2008	2/19/2008
	100 Area RDR RL/Reg review	2/5/2008	3/25/2008
	100 Area SAP RL/Reg review	2/5/2008	3/25/2008
	RL/Regulator Review Draft A WI 100 N Misc Pipe	5/13/2008	6/10/2008
	100 Area RDR - RL approve & issue Rev. 0	5/21/2008	5/28/2008
	100 Area SAP - RL approve & issue Rev. 0	5/21/2008	5/28/2008
100-IU-2/6			
	RL/Reg Review Draft A WI for -600-149	1/7/2008	1/31/2008
	RL/Reg Review Draft A WI for -600-111	2/4/2008	3/3/2008
	DOE Review of 100-IU-2/6 Cultural Review	2/11/2008	3/17/2008
	RL/Reg Review Draft A Closure Doc for 600-1	6/23/2008	8/6/2008
	Backfill concurrence for 600-149	6/23/2008	
	RL/Reg Review Draft A Closure Doc for 600-1	7/21/2008	9/3/2008
	Backfill concurrence for 600-111	7/21/2008	
	RL/Regulator Approval of 100-IU-2/6 Air Monitoring Plan	8/26/2008	9/30/2008

Attachment 14

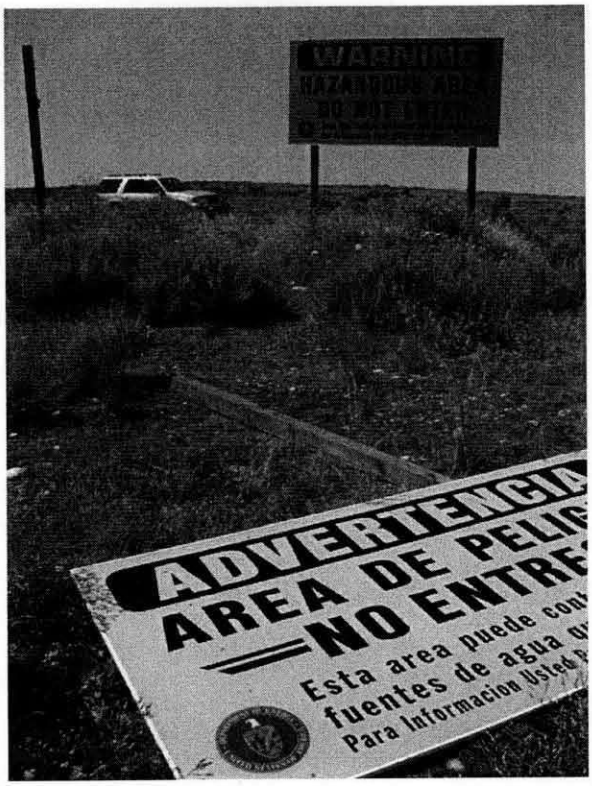
Annual Sitewide Institutional Controls (IC) Review
River Corridor Contractor (RCC)

- **Background**
  - ***Sitewide Institutional Controls Plan for Hanford CERCLA Response Actions* (DOE/RL-2001-41, Rev. 2)**
    - **Requires annual IC effectiveness review**
    - **Results to be reported in September UMM**

- **Scope of 2007 RCC review**
  - **Reporting of public trespass events during CY 2006**
  - **Selected 100 Area active waste sites within Hanford Reach Study Act area (¼ mile of the Columbia River shoreline)**
    - **Excavation Permits**
    - **Field inspection of signage**
  - **Status of 300 Area ICs established in response to last year's IC review**

- **Results**
  - **No public trespass events identified by Projects or Hanford Patrol**
  - **Approved Excavation Permits in place for all active remediation waste sites reviewed**
  - **Warning signs in place on 100-Area roadways and shoreline except for Spanish-language shoreline sign at 100-F**
    - **Shoreline sign was repaired and is now in place**
  - **300 Area ICs (fencing) in place and functioning properly**

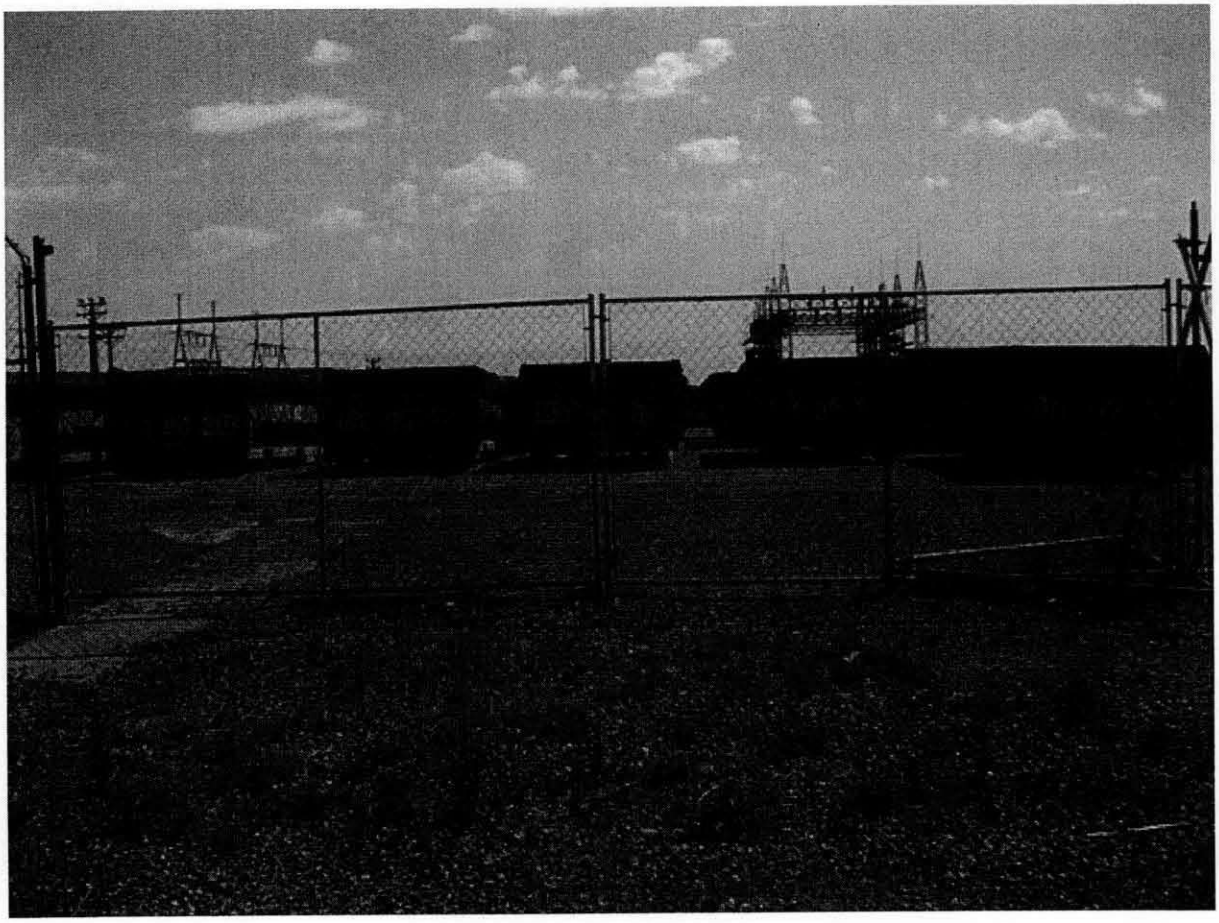
2007 RCC ANNUAL IC REVIEW



Shoreline Signage at 100-F - 7/26/07

Repaired Shoreline Sign at 100-F – 8/2/07

2007 RCC ANNUAL IC REVIEW



**300 Area NW Fence Line Looking East into Queue,
Showing Fencing in Place**

Attachment 15

(15)

300 Area D4 Status
September 13, 2007
100/300 Area Combined Unit Manager Meeting

Ongoing Hazardous Material Removal

- **321**
- **324**
- **327**
- **337**
- **384**

Ready for Demolition:

- **3718E**
- **328**

Demolition Activities:

- **3720** – load out continuing
- **306E BA, 3706 BA, 3705 BA** – demolished and loaded out
- **306W** – demolition is ongoing

60-Day Project Look Ahead

- Complete load out of 3720 and 306W
- Begin demolition of 328/328A/328 BA
- Begin demolition of 384
- Begin hazardous material removal at 308, 337B, 337BA, 3718 (including A, B, C, and M)
- Complete hazardous material removal at 337
- Transition 323 and 3730 from PNNL to WCH, permitted stacks will be closed prior to transition

Attachment 16

(16)

100 Area D4/ISS Status
September 13, 2007
100/300 Area Combined Unit Manager Meeting

Ongoing Demolition Activities

- **183-N** – Load-out ongoing.
- **163-N** – Segregation of debris for size reduction and load-out ongoing.
- **1312-N LERF** – Backfill operations ongoing.
- **109-N** – Asbestos abatement in Zone 1 complete. Zone 2 abatement commencing the week of 9/10/07.
- **184-N/NA** - Hazardous material removal ongoing.
- **MO-055/MO-911/MO-900** – Demobilize work site.

60-Day Project Look Ahead

- 182-N hazardous waste removal.
- 117-N scoping and characterization.
- Remaining 1802N pipe to be shipped to ERDF.
- 1705-N/NA and 1706-N/NA asbestos removal and load-out.
- 1312-N LERF inlet piping shipment to ERDF.
- B Reactor roof replacement initiation (partial).
- 184-N demolition preparation.
- Issue Request for Proposal for 105-N/109-N demolition and Safe Storage Enclosure construction
- Issue Request for proposal for explosive demolition of 184-N and 116-N.

Attachment 17

135456

^WCH Document Control

From: Saueressig, Daniel G
Sent: Monday, September 10, 2007 11:02 AM
To: ^WCH Document Control
Cc: Wahler, William G; Yasek, Donna M
Subject: FW: Ecology's Approval to Backfill the Hydraulic Oil Spill Area of the 183-N Waste Plant

Please provide a chron #. This email documents are regulatory agreement.

Thanks,

Dan Saueressig
100 Area D4 Environmental
373-5473 (office)
521-5326 (cell)

From: Smith-Jackson, Noe'l (ECY) [mailto:Nsmi461@ECY.WA.GOV]
Sent: Monday, September 10, 2007 10:43 AM
To: Saueressig, Daniel G
Cc: Price, John; Donnelly, Jack W; Jones, Mandy E; Whalen, Cheryl (ECY); Smith-Jackson, Noe'l
Subject: Ecology's Approval to Backfill the Hydraulic Oil Spill Area of the 183-N Waste Plant

Mr. Saueressig-

Ecology approves the request of Washington Closure Hanford (WCH) to backfill the area of the 183-N Waste Plant where the hydraulic oil spill occurred on February 5, 2007. The six split samples that were collected from this area by Ecology on February 21, 2007, showed that contaminants are below the MTCA cleanup levels. No further cleanup activities are required for this spill area.

Please include this approval statement within the September 2007 100/300 Area Unit Manager's Meeting minutes.

Thank you,
Noe'l Smith-Jackson
Department of Ecology Chemist
(509) 372-7926

Attachment 18

Environmental Protection Mission Completion Project
September 13, 2007

Orphan Sites Evaluations

- Continuing evaluation process for 100-IU-2, 100-IU-6; beginning integration task in October/November 2007
- Completed field walkdown for 100-H Area in September 2007
- Preparing to transition from historical review to field walkdown for 100-K Area in October 2007
- Historical review task for 100-N Area to begin in October 2007

100/300 Area RCBRA Component

- Risk assessment Draft A review ended on 9/7/07, with Ecology comments expected on 9/12/07. Comments were provided by DOE and EPA. The Yakama Nation, HAB and Trustee entities, Ecology and Oregon, have also submitted comments. An October 30th workshop will be held to discuss comment resolution, with discussions of significant comments occurring in the interim.

Inter-Areas

- Final sampling activities are in progress – collection of remaining sculpin samples and replacement sediment samples for the 100/300 Area Component in progress. Data being transmitted to N&C for inclusion in Inter-Areas risk assessment.

Columbia River Component

- WCH submitted an estimate for next steps for the Columbia River Component and anticipates a response from DOE.